

South Dakota Perinatal Health Risk Assessment Report 2005



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Table of Contents

Tables and Figures

List of Tables	iii
List of Figures	iv

Introduction

Purpose	1
Methods	1
Highlights	1

Survey Results

Intendedness of Pregnancy	5
Family Planning and Birth Control	7
Smoking Before, During and After Pregnancy	9
Alcohol Use Before Pregnancy	13
Alcohol Use During Pregnancy	14
Vitamins and Folic Acid Supplements	15
Oral Health	16
Fish Consumption	17
Mother's Health Conditions	18
Prenatal Care	19
Method of Payment for Prenatal Care	22
Weight Gain During Pregnancy	23
Physical Activity	24
Sources of Pregnancy Information	26
Information Received by Respondents	26
Seat Belts	27
Car Safety	27
Participation in State and Federal Programs	30
HIV/AIDS	31
Teratogens	32
Preventing Infections During Pregnancy	33
Preterm Labor	33
Life Stressors	34
Prematurity and Low Birth Weight	35
Well Baby Check-Ups	36
Newborn Hearing Screening	38
Discharge Age	39
Home Visits	39
Sources of Baby Care Information	41
SIDS-Related Behaviors	43
Bedding Supplies and SIDS	46
Breastfeeding	47
Barriers to Breastfeeding	49
Shaken Baby Syndrome and Infant Safety	50
Solid Foods	51
Household Information	52
Annual Household Income	52
Age of Parents	53
Education of Parents	54
Survey Results Compared to Vital Statistics Data	55

Glossary	59
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Bibliography	63
--------------------	----

Appendix	67
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List of Tables:

1. Mother's Feelings About Being Pregnant.....	5
2. Father's Feelings About The Pregnancy.....	5
3. Using Birth Control at Conception.....	7
4. Reasons for Not Using Birth Control.....	7
5. Post-Pregnancy Sources for Obtaining Birth Control.....	7
6. Tobacco Use During Pregnancy.....	9
7. Mother's Smoking Habits After Pregnancy.....	10
8. Smoking Behaviors Around The Baby.....	11
9. Number of Days Per Week Alcohol Was Consumed.....	13
10. Alcohol Use During Pregnancy.....	14
11. Multi-Vitamin or Folic Acid Supplement Use.....	15
12. Last Visit to Dentist or Dental Office.....	16
13. How Long Since Last Teeth Cleaning.....	16
14. Problems With Teeth or Gums During Pregnancy.....	16
15. Fish Consumed in Last Two Months of Pregnancy.....	17
16. Meals Consumed of Different Types of Fish.....	17
17. Size of Meals.....	17
18. Health Conditions Before or During Pregnancy.....	18
19. Did Anything Keep You From Getting Prenatal Care as Early as You Wanted?.....	19
20. Did Anything Keep You From Having as Many Prenatal Visits as You Wanted?.....	21
21. Method of Payment for Prenatal Care.....	22
22. Weight Gain During Pregnancy.....	23
23. Did You Participate in any Physical Activity Before or During Pregnancy?.....	25
24. Sources of Pregnancy Information.....	26
25. Summary of Information Received Before, During or After Pregnancy.....	26
26. Baby Came Home From Hospital in a Car Safety Seat.....	27
27. Source of Current Car Safety Seat.....	28
28. Participation in Assistance Programs.....	30
29. Life Stressors.....	34
30. Number of Routine Well Baby Check-Ups.....	36
31. Did Anything Keep You From Taking Your Baby for Routine Well Baby Care?.....	36
32. Did Anything Keep You From Getting Medical Care for Your Baby When He or She Was Sick?.....	37
33. Newborn Hearing Screenings.....	38
34. Age When Baby Came Home From The Hospital.....	39
35. Were You Visited at Home?.....	39
36. Most Useful Sources of Baby Care Information.....	41
37. Baby Care Information Received.....	41
38. Sleeping Positions of The Baby.....	43
39. Where Baby Sleeps.....	46
40. Materials Under Sleeping Baby.....	46
41. Baby Breastfed at Hospital Discharge.....	47
42. Breastfeeding Class Attendance.....	47
43. Factors Preventing Mothers From Breastfeeding.....	49
44. When Baby Was First Fed Solid Foods.....	51
45. Number of People in Household.....	52
46. Number of People 17 Years or Younger in Household.....	52
47. Annual Household Income.....	52
48. Age of Baby's Mother.....	53
49. Age of Baby's Father.....	53
50. Education of Mother.....	54
51. Education of Father.....	54
52. Low Birth Weight.....	55
53. Mother Smoked During Pregnancy.....	55
54. Average Age of Mother.....	55

List of Figures:

1. Mother's Feelings About Being Pregnant	6
2. Father's Feelings About The Pregnancy.....	6
3. Using Birth Control at Conception	8
4. Reasons for Not Using Birth Control	8
5. Post-Pregnancy Sources for Obtaining Birth Control.....	8
6. Number of Cigarettes Smoked Per Day.....	9
7. Tobacco Use During Pregnancy	10
8. Mother's Smoking Habits After Pregnancy.....	11
9. Smoking Behaviors Around The Baby	12
10. Number of Days Per Week Alcohol Was Consumed	13
11. Alcohol Use During Pregnancy	14
12. Multi-Vitamin or Folic Acid Supplement Use	15
13. Reasons Women Did Not Get Prenatal Care Earlier	19
14. Trimester Prenatal Care Began and Barriers to Prenatal Care.....	20
15. Reasons Women Did Not Have as Many Prenatal Visits as Desired	21
16. Method of Payment for Prenatal Care	22
17. Weight Gain During Pregnancy.....	24
18. Use of Car Safety Seat	28
19. Source of Current Car Safety Seat.....	29
20. Current Car Safety Seat Instruction Source.....	29
21. Participation in State and Federal Programs.....	31
22. Top Ten Life Stressors.....	34
23. Baby Was Born More Than Three Weeks Before Due	35
24. Reasons Baby Has Not Been to Doctor for a Routine Check-Up, 2003-2005	36
25. Reasons Baby Did Not Get Medical Care When Sick, 2003-2005	37
26. Newborn Hearing Screenings	38
27. Age When Baby Came Home From The Hospital	40
28. Age of Baby at Time of First Home Visit	40
29. Most Useful Sources of Baby Care Information.....	42
30. Baby Care Information Received From Health Care Professionals	42
31. Sleeping Positions of The Baby.....	44
32. Why Back Was Chosen as Baby's Sleeping Position.....	44
33. Why Side Was Chosen as Baby's Sleeping Position.....	45
34. Why Stomach Was Chosen as Baby's Sleeping Position.....	45
35. Where Baby Sleeps.....	46
36. Baby Breastfed at Hospital Discharge	48
37. Baby Breastfed Once a Day for First Month	48
38. Factors Preventing Mothers From Breastfeeding	49
39. Age of Infants Eating Solid Foods at The Time of The Survey	51

Introduction

Purpose

The South Dakota Maternal and Child Health Program's mission is to provide leadership and technical assistance to assure systems that promote the health and well-being of women of reproductive age, infants, children, and youth, including those with special health care needs and their families.

In 1997, as part of its mission to ensure healthy women, children, and families, the South Dakota Department of Health conducted the first survey of new mothers with infants ranging in age from newborn to eight months old.

This survey has been conducted every other year and was completed for the fifth time in 2005. Once again new mothers were asked questions about behaviors prior to conception such as tobacco and alcohol use and about health care and education received during the pregnancy. Babies ranged in age from newborn to eight months, so mothers were also asked about infant health care and behaviors such as car-seat use and infant sleep position. Questions on mother's physical activity or exercise before or during the last three months of their pregnancy were added for the first time in 2005. A copy of the 2005 survey can be found in the appendix.

Questions in the survey were chosen to provide information that would help the South Dakota Department of Health develop targeted program interventions. The information should prove useful to both private and public health care providers in tailoring health care services to the needs of prenatal clients and infants in South Dakota.

Methods

A 66-question survey was mailed in March 2005 to 2,785 mothers who had given birth between August 2004 and January 2005; 63 were undeliverable, 936 surveys were returned, which is a return rate of 34.4 percent. The returned surveys represent 16.3 percent of resident births during this time period. It is important to remember that the information in this report is based on data that was self-reported.

Highlights

- The pregnancies were intended by 64 percent of the mothers.
- The mothers said that 57.6 percent of the fathers wanted the pregnancy then or sooner. Overall, 50.3 percent of the pregnancies were intended by both parents.
- At the time of the pregnancy, nearly 84.1 percent of the respondents were not using birth control. The main reason for not using birth control was because they wanted to get pregnant.
- Of the survey respondents, 58.9 percent reported they did take a multi-vitamin or folic acid supplement prior to pregnancy.
- The most common reason women cited for not seeking prenatal care earlier was their doctor didn't want to see them until 12 weeks into their pregnancy.
- Between 80 and 85 percent of the women remember being told the signs of preterm labor and the importance of folic acid.
- Four out of five women were provided information about the harmful effects of smoking and drinking alcohol while pregnant.

Highlights (continued)

- Over half or 52.2 percent of the women did not drink any alcohol in the three months prior to pregnancy.
- Prior to pregnancy 81.2 percent of the women surveyed did not smoke. Of those that did smoke prior to pregnancy, 61.5 percent stopped during the pregnancy.
- Only 20.8 percent of the women gained the recommended amount of weight while pregnant; 55.2 percent gained more than the recommended amount.
- Women said that the doctor, information from books and magazines, and previous experience with pregnancy were the most useful sources of information about being pregnant.
- Experiences with other children, talking with the child's doctor, a study of books and pamphlets, and family and friends, were the most helpful sources of information in learning to care for their baby.
- Only 1 percent of the babies, ranging in age from newborn to eight months old, had not been to the doctor for a routine well baby check-up.
- Babies were laid on their backs to sleep by 80.8 percent of the respondents and 91.1 percent of mothers said smoking was not allowed in their houses or cars at all or when the baby was present.
- Information about breastfeeding was received by 88.2 percent of the respondents and 78.5 percent were breastfeeding their babies when discharged from the hospital.
- When asked whether they placed their babies in car seats for travel, 95.3 percent responded “always”. The remaining 4.7 percent responded “sometimes” because the baby needed feeding, diaper change, was crying, or that it takes too much time.
- Within the past year, 55 percent of the women had their teeth cleaned, whereas 79.3 percent did not have any problems with their teeth or gums while pregnant.
- In the last two months of their pregnancy 44.7 percent of the survey participants reported eating fish.
- Prior to pregnancy 32.3 percent of the respondents participated in physical activity 1 to 2 days a week. During the last three months of their pregnancy, 34.1 percent participated 1 to 2 days.

Survey Results

Intendedness of Pregnancy

Sixty-four percent of survey respondents said that they intended to be pregnant then or had wanted to be pregnant sooner. When asked how the baby's father felt about the pregnancy, 57.6 percent of the respondents said that the father wanted the pregnancy then or sooner.

Overall, 50.3 percent of the pregnancies were intended by both parents. When the father intended the pregnancy, 87.2 percent of mothers also intended the pregnancy. When the mother intended the pregnancy, 78.6 percent of the fathers also wanted the pregnancy then or sooner, and an additional 17.7 percent stated that it didn't matter when the pregnancy occurred.

When each age group is analyzed, the mothers aged 30 to 34 had the highest percent of intended pregnancies at 77.7 percent. Of their partners, 74.8 percent wanted the pregnancy then or sooner. Fathers in the same age group (30 to 34) had the highest percentage of wanting the pregnancy then or sooner at 69.3 percent.

Of the 64 percent of respondents who intended the pregnancy then or sooner, 52.3 percent reported an income of \$50,000 or more, while 8.8 percent reported an income of less than \$20,000 a year.

Table 1: Mother's Feelings About Being Pregnant

<i>Wanted to be pregnant then</i>	<i>45.2%</i>
<i>Wanted to be pregnant sooner</i>	<i>18.8%</i>
<i>Wanted to be pregnant later.....</i>	<i>14.0%</i>
<i>Unsure of feelings</i>	<i>13.1%</i>
<i>Other</i>	<i>5.5%</i>
<i>Didn't want to be pregnant then or any time in the future</i>	<i>3.2%</i>
<i>Not answered</i>	<i>0.2%</i>

Source: South Dakota Department of Health

Table 2: Father's Feelings About The Pregnancy

<i>Wanted the pregnancy then.....</i>	<i>40.8%</i>
<i>Didn't matter when the pregnancy occurred</i>	<i>17.7%</i>
<i>Wanted the pregnancy sooner.....</i>	<i>16.8%</i>
<i>Wanted the pregnancy later</i>	<i>12.7%</i>
<i>Didn't want the pregnancy then or any time in the future</i>	<i>6.1%</i>
<i>Didn't know.....</i>	<i>5.6%</i>
<i>Not answered.....</i>	<i>0.3%</i>

Source: South Dakota Department of Health

Of the mothers surveyed in 2003, aged 15 to 44, only 61.5 percent wanted the pregnancy then or sooner, compared to 63.9 percent in 2005.

Healthy People 2010

Objective 9.1 is to increase the proportion of pregnancies that are intended to 70% among females aged 15 to 44 years.

Source: U.S. Department of Health and Human Services

Department of Health Activities

► The Department of Health receives funds under Title X of the Public Health Services Act to provide family planning services. These funds support the program which consists of comprehensive educational, medical and social services necessary to aid individuals in determining freely the number and spacing of their children.

► For further information contact Beverly Duffel, Family Planning Program Manager, South Dakota Department of Health, (605) 773-3737.

Figure 1: Mother's Feelings About Being Pregnant

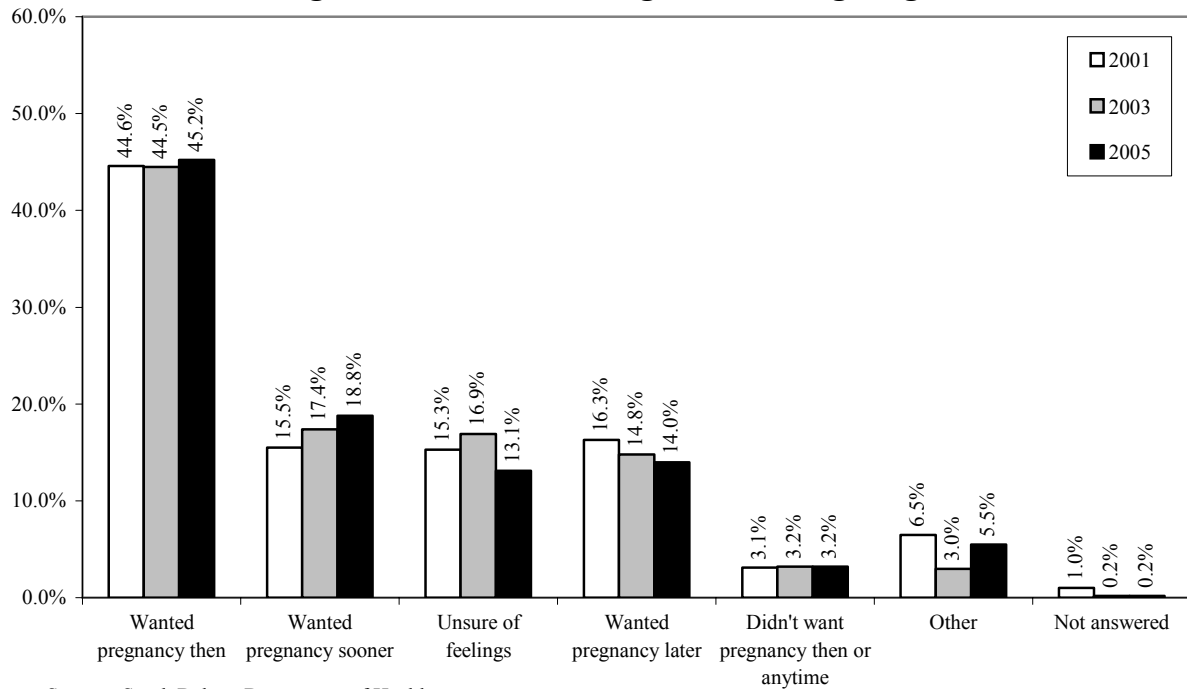


Figure 2: Father's Feelings About The Pregnancy

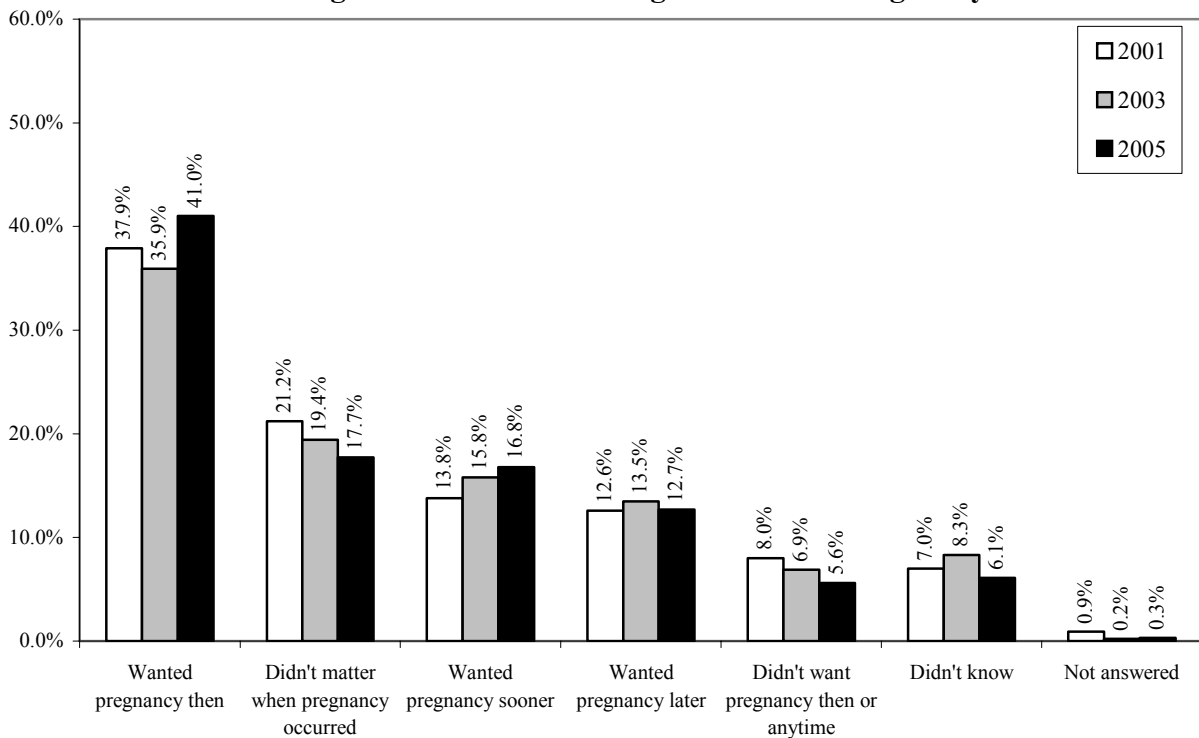


Table 3: Using Birth Control at Conception

No.....	84.1%
Yes.....	15.7%
Not answered	0.2%

Source: South Dakota Department of Health

Table 4: Reasons for Not Using Birth Control

Wanted to get pregnant.....	56.4%
Didn't want to use birth control.....	8.7%
Didn't think I could get pregnant.....	5.4%
Other	5.4%
Had side effects from birth control	4.8%
Against religious beliefs.....	3.6%
Husband or partner didn't want to use birth control.....	3.3%
Didn't think would have sex.....	3.0%
Couldn't afford birth control	2.8%
Had problems obtaining birth control.....	0.7%

Source: South Dakota Department of Health

Family Planning and Birth Control

At the time the pregnancy occurred, 84.1 percent of the women were not using any form of birth control. The percentage of women not using birth control increased with income.

More than half or 56.4 percent of the respondents said that the reason they were not using any birth control was because they wanted to get pregnant at that time. Respondents not wanting to use birth control was 8.7 percent with an additional 3.3 percent whose husband or partner didn't want to use birth control either.

Later in the survey, women were asked where they usually obtained their birth control. The highest percentage, 43.5 percent, of women obtained birth control from a private doctor or clinic.

Eighty-seven percent of the women remember a doctor, nurse or health professional talking with them about birth control during pregnancy or following the baby's birth.

Table 5: Post-Pregnancy Sources for Obtaining Birth Control

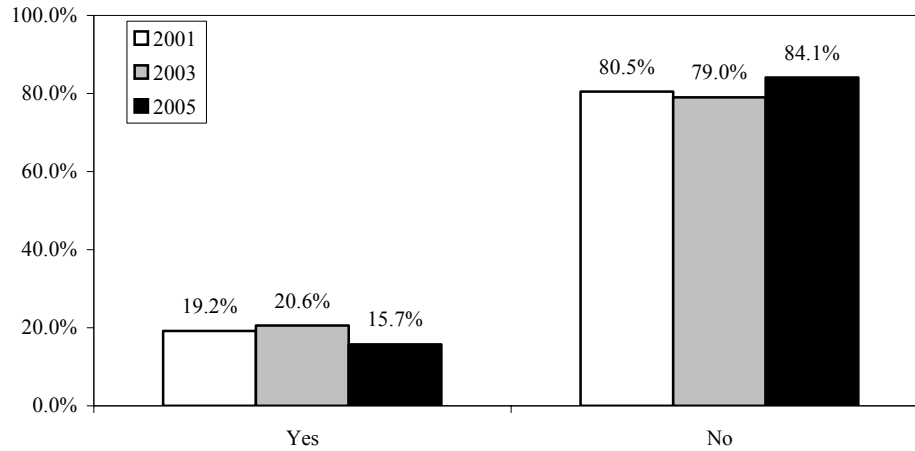
Private Physician/Clinic	43.5%	Using natural family planning.....	6.7%
No birth control.....	14.1%	Indian Health Service	2.5%
Family Planning.....		Other.....	2.4%
Program/Clinic.....	10.0%	Community Health Center	1.9%
Over-the-counter.....		Military Health System	1.3%
(condoms, foams, etc.).....	9.3%	USD Residency Program.....	0.0%
Tubes tied/vasectomy	7.8%	Not answered.....	0.5%

Source: South Dakota Department of Health

Department of Health Activities

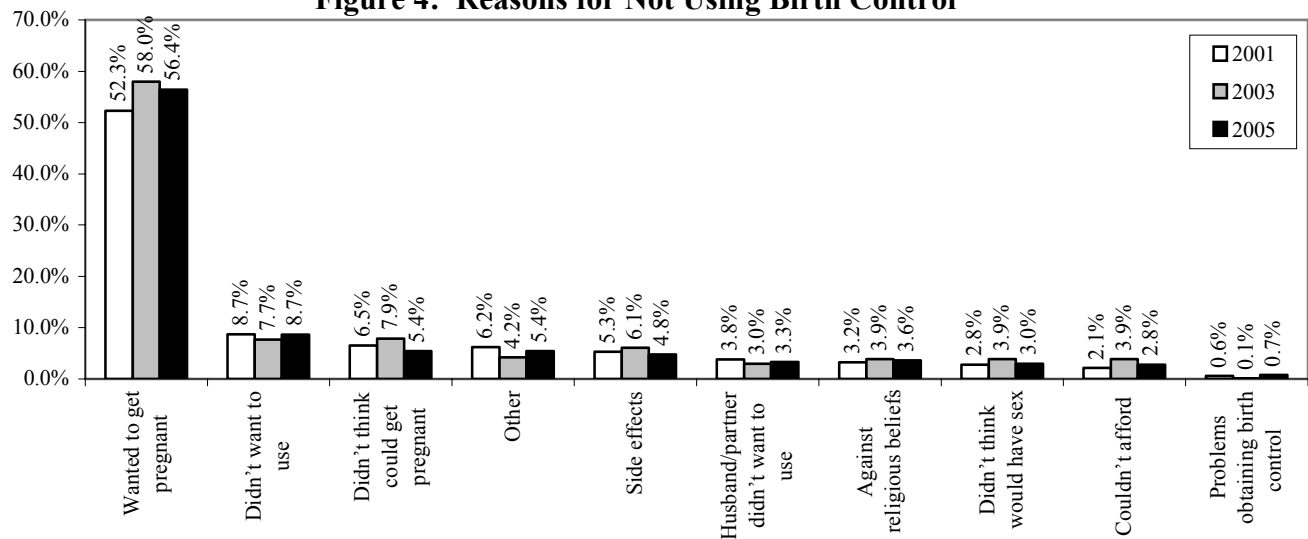
► The Department of Health Family Planning Program provides voluntary and confidential family planning services including education, counseling, nursing, medical, ancillary and direct contraceptive services. Clinic sites include 22 sites operated by non-profit organizations under contract with the Department of Health. In addition, the Office of Community Health Services within the Department of Health operates another 26 sites. A list of these sites can be found at www.state.sd.us/doh/famhlth/famplan.htm.

Figure 3: Using Birth Control at Conception



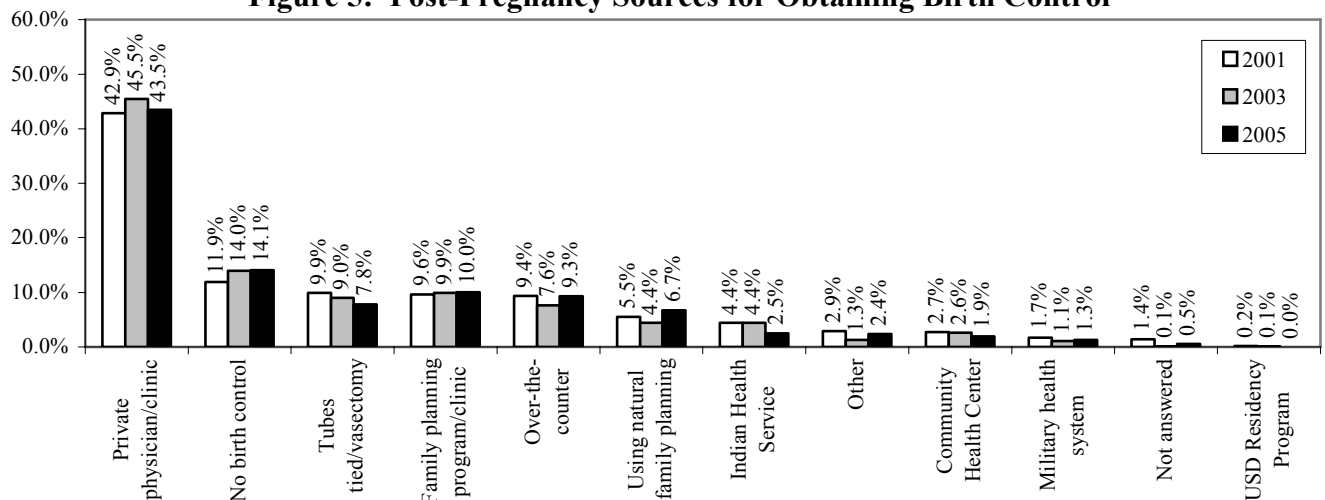
Source: South Dakota Department of Health

Figure 4: Reasons for Not Using Birth Control



Source: South Dakota Department of Health

Figure 5: Post-Pregnancy Sources for Obtaining Birth Control



Source: South Dakota Department of Health

Smoking Before, During and After Pregnancy

According to the 2001 report from the Surgeon General on Women and Smoking, women who smoke, like male smokers, are at increased risk of cancer, cardiovascular disease, and pulmonary disease. However females experience unique risks related to menstrual and reproductive function. Women who smoke may also have an increased risk for ectopic pregnancy, spontaneous abortion, premature rupture of membranes, abruptio placenta (placenta separation from the uterus), and placenta previa (abnormal location of the placenta), which can cause massive bleeding during delivery, and an increased risk for preterm delivery.

Adverse outcomes for the infant can include: cleft palates and cleft lips,

childhood cancers, and lower average birth weight. The longer the mother smokes during pregnancy, the greater the effect on the infant's birth weight. In addition, the risk for stillbirths and neonatal deaths and the risk for sudden infant death syndrome (SIDS) are higher for the offspring of women who smoke during pregnancy.

In the three months prior to their pregnancy 81.2 percent of the women stated that they did not smoke at all and 17.1 percent of the women smoked fewer than 20 cigarettes per day.

Of the women surveyed 77.2 percent were given information by a doctor, nurse or other health professional on the dangers of smoking while pregnant.

**Figure 6: Number of Cigarettes Smoked Per Day
In The Three Months Prior to Pregnancy**

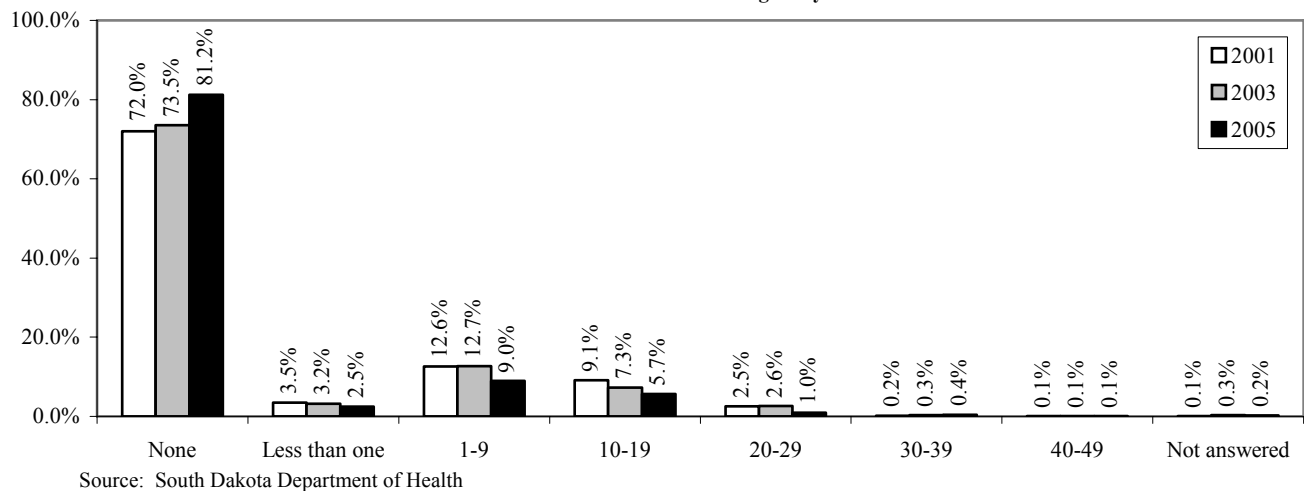
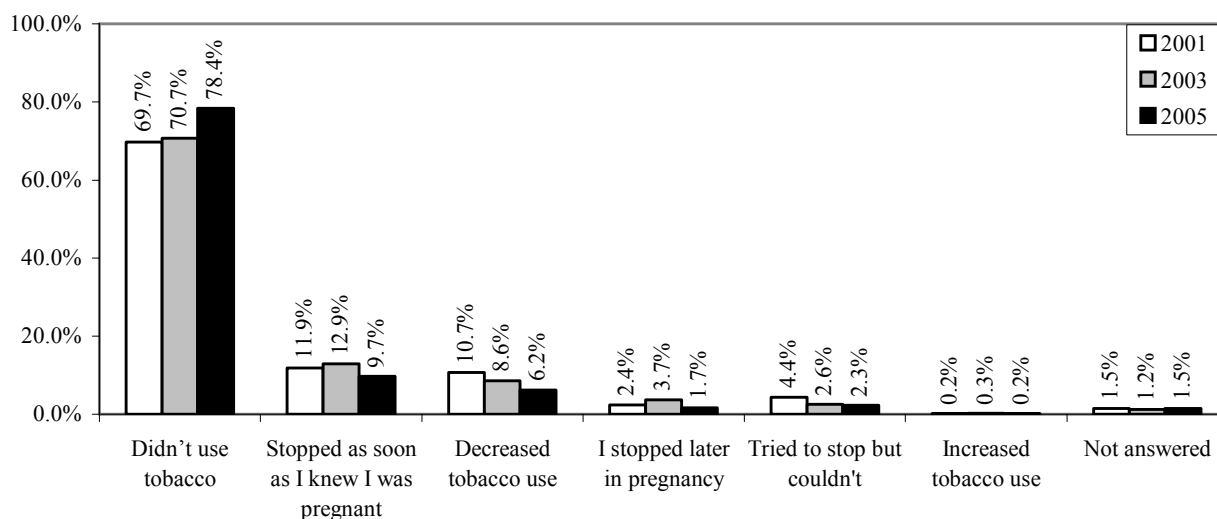


Table 6: Tobacco Use During Pregnancy

<i>Didn't use tobacco.....</i>	<i>78.4%</i>
<i>Stopped completely.....</i>	<i>9.7%</i>
<i>Decreased tobacco use.....</i>	<i>6.2%</i>
<i>Tried to stop but but were unsuccessful.....</i>	<i>2.3%</i>
<i>I stopped later in pregnancy.....</i>	<i>1.7%</i>
<i>Increased tobacco use.....</i>	<i>0.2%</i>
<i>Not answered.....</i>	<i>1.5%</i>

Source: South Dakota Department of Health

Figure 7: Tobacco Use During Pregnancy



Source: South Dakota Department of Health

Healthy People 2010

Objective 27-9 is to reduce the proportion of children who are regularly exposed to tobacco smoke at home by 10%.

Source: U.S. Department of Health and Human Services

Reducing or stopping tobacco use can decrease the chance that the baby's development will be affected and 88.1 percent of the women said that they either stopped tobacco use completely or did not use tobacco at all during their pregnancy

Of the respondents who either quit or smoked during pregnancy, 56.9 percent were advised to quit. Of those, 33.1 percent were referred to a telephone quit line or other quit tobacco program.

Survey respondents not using tobacco during pregnancy has increased from 69.7 percent in 2003 to 78.4 percent in 2005.

In addition, 54.1 percent of the respondents said that a health care professional had talked to them about the effects of using chewing tobacco during pregnancy.

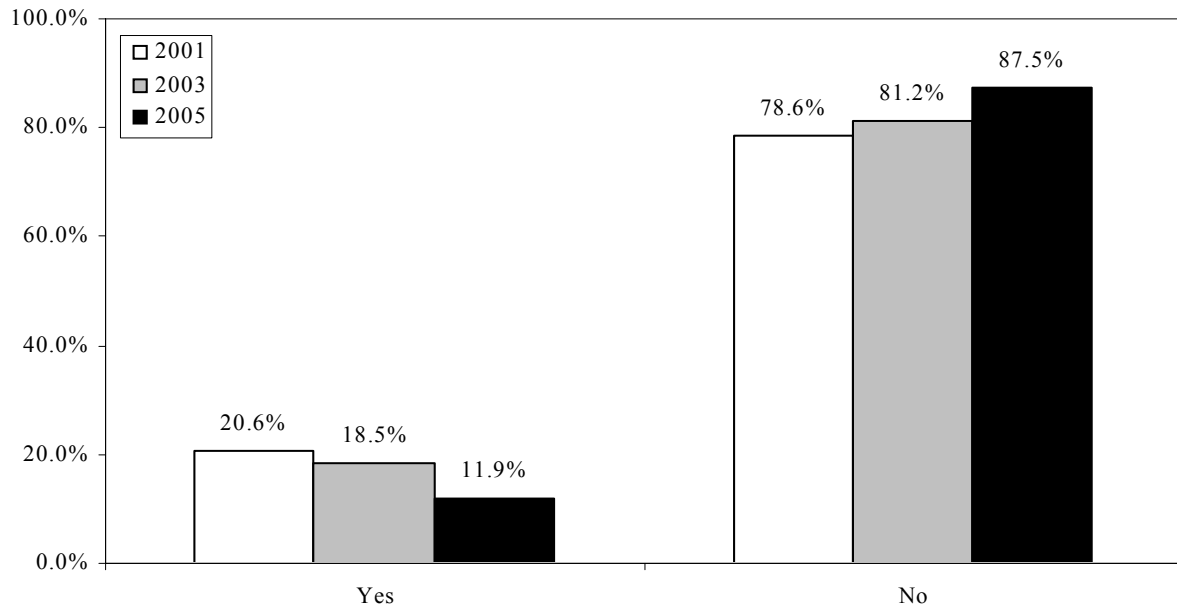
Table 7: Mothers' Smoking Habits After Pregnancy

No.....	87.5%
Yes.....	11.9%
Not answered	0.6%

Source: South Dakota Department of Health

An additional threat to the baby can occur when he/she is exposed to second-hand smoke. Of the women who responded to the survey, 85.4 percent said that smoking is not allowed at any time in the house or car compared to 74.5 percent in 2003. Only 1.9 percent said that smoking is allowed anytime in the house or car.

Figure 8: Mother's Smoking Habits After Pregnancy



Source: South Dakota Department of Health

Survey respondents were asked if secondhand smoke increases a baby's risk of dying from SIDS. Of the respondents, 95.2 percent knew the statement to be true while 2.9 percent thought it was false, 1.9 percent did not answer.

Of the survey respondents who knew secondhand smoke increases the risk for SIDS (95.2 percent) 1.9 percent reported that smoking is allowed anytime, anywhere in the house or car. However, of the survey respondents who believed the statement to be false (2.9 percent) almost all reported that no one smokes in the house or car at all.

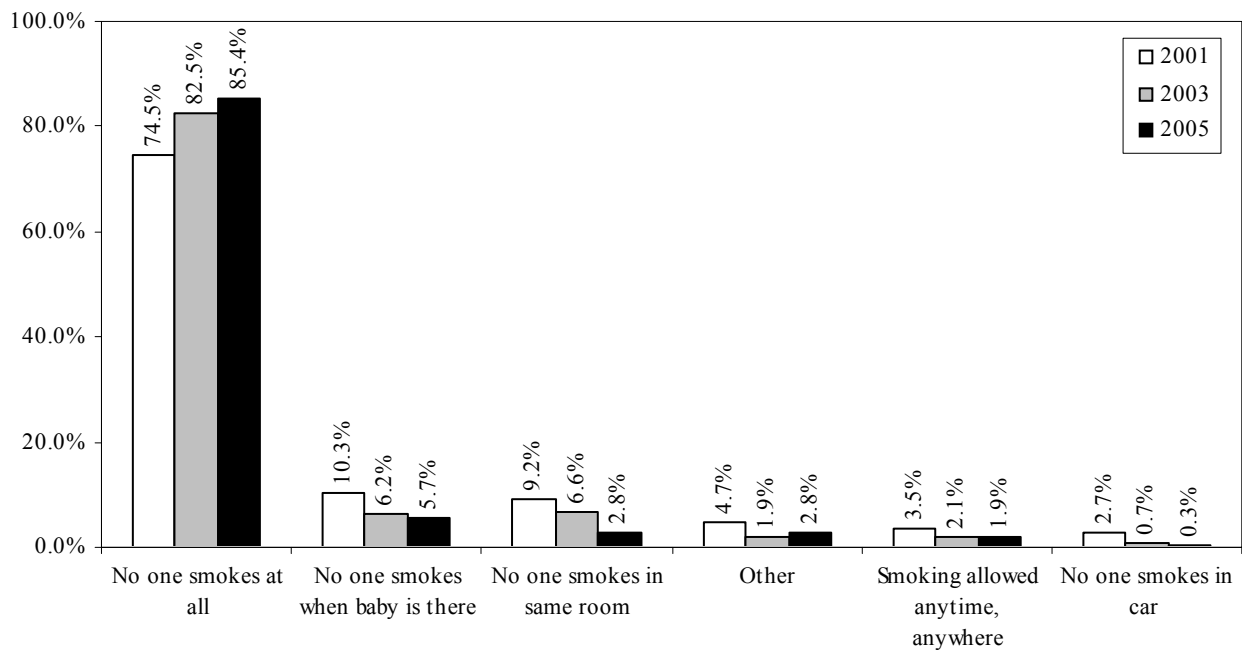
Only 70 percent of the respondents said that a doctor, nurse or other health care professional had talked to them about how smoking around the baby could affect his/her health compared to almost 80 percent in 2003.

Table 8: Smoking Behaviors Around The Baby

No one smokes in house or car at all	85.4%
No one smokes in house or car when baby is there	5.7%
No one smokes in the same room when baby is there	2.8%
Other.....	2.8%
Smoking allowed anytime, anywhere in house or car.....	1.9%
No one smokes in the car when baby is there	0.3%

Source: South Dakota Department of Health

Figure 9: Smoking Behaviors Around The Baby



Source: South Dakota Department of Health

Findings from the National Center for Health Statistics demonstrate that women who smoke cigarettes during or after pregnancy put their babies at increased risk for SIDS. Babies exposed to smoke only after birth were twice as likely to die from SIDS as those whose mothers did not smoke at all. Mothers who smoked both during and after pregnancy tripled their baby's risk for SIDS. Recent studies have found that the risk of SIDS rises with each additional smoker in the household, the numbers of cigarettes smoked a day and the length of the infant's exposure to cigarette smoke. Components of smoke are believed to interfere with an infant's developing lungs and nervous system and to disrupt a baby's ability to wake from sleep.

Department of Health Activities

► The Department of Health is the lead agency for the statewide management of programs targeted at tobacco use prevention and cessation. The Tobacco Control Program **goals** are:

- Prevent young people from starting to use tobacco products and reduce their access to tobacco products.
- Persuade and help smokers to stop smoking.
- Protect nonsmokers by reducing their exposure to secondhand smoke.

► The Department of Health, Tobacco Control Program coordinates tobacco prevention and cessation efforts with WIC, Baby Care and Bright Start Home Visitation programs. Healthcare providers are encouraged to utilize the Public Health Service, Treating Tobacco Use and Dependence guidelines. Educational materials for healthcare providers and community prevention efforts are available at www.state.sd.us/doh/tobacco, please select the Resource Guide. Tobacco cessation assistance, including coaching at no cost to the caller and reduced cost medications, is available by calling the SD QuitLine at 1-866-737-8487. More information about tobacco cessation can be found at www.healthysd.gov/QuitTobacco.

Table 9: Number of Days Per Week Alcohol Was Consumed

None.....	52.2%
< one per day.....	29.8%
1	5.4%
2	6.1%
3	2.8%
4	0.7%
5	0.3%
6 or more	0.1%
Not answered.....	2.5%

Source: South Dakota Department of Health

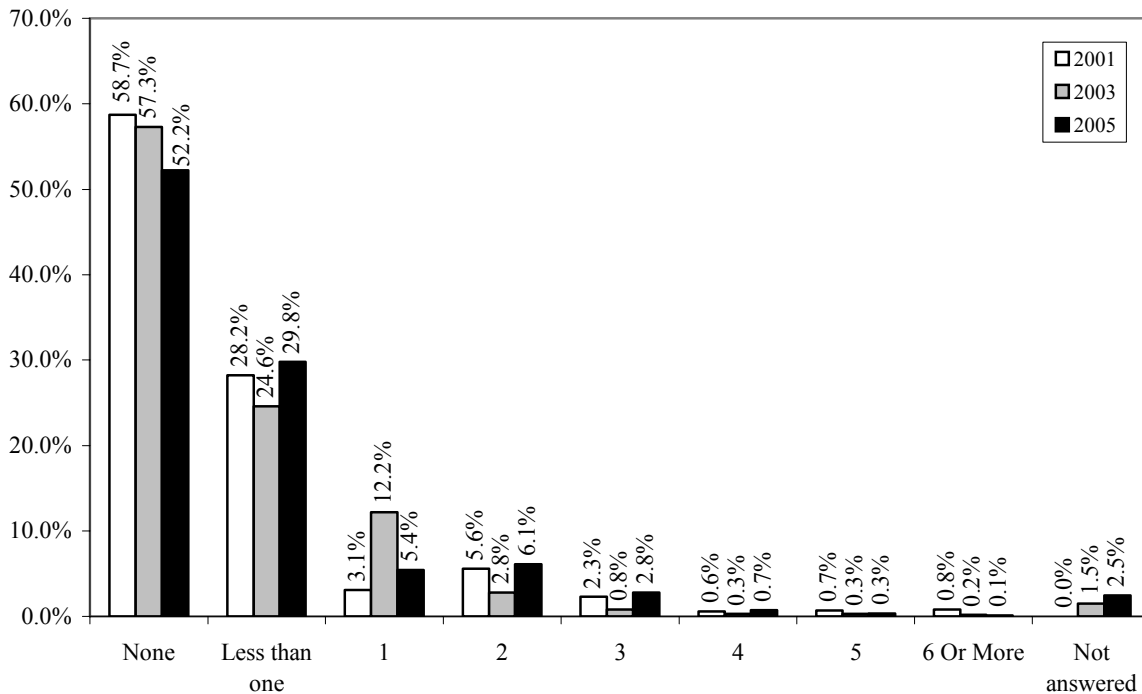
Alcohol Use Before Pregnancy

More than half or 52.2 percent of the survey respondents did not drink beer, wine, or other liquor in the three months prior to pregnancy.

When asked how many alcoholic beverages were consumed on the days they did drink, 63.5 percent of survey respondents reported two or less.

When asked about information received from a healthcare provider, 77.9 percent of women reported they were given information about the consequences of drinking alcohol during pregnancy.

**Figure 10: Number of Days Per Week Alcohol Was Consumed
In The Three Months Prior to Pregnancy**



Source: South Dakota Department of Health

Table 10: Alcohol Use During Pregnancy

<i>Never used alcohol</i>	56.6%
<i>Stopped as soon as I knew I was pregnant</i>	39.8%
<i>Decreased alcohol use</i>	1.7%
<i>Stopped later in pregnancy</i>	0.5%
<i>Increased use of alcohol</i>	0.1%
<i>Tried to stop, but couldn't</i>	0.0%
<i>Not answered</i>	1.3%

Source: South Dakota Department of Health

Drinking during pregnancy can harm the developing organs such as the brain and heart and may also lead to Fetal Alcohol Syndrome (FAS). Babies with FAS are small, slow or mentally retarded, and may have deformed faces and heart problems. This is a lifetime condition. See the glossary (page 59) for more information on FAS.

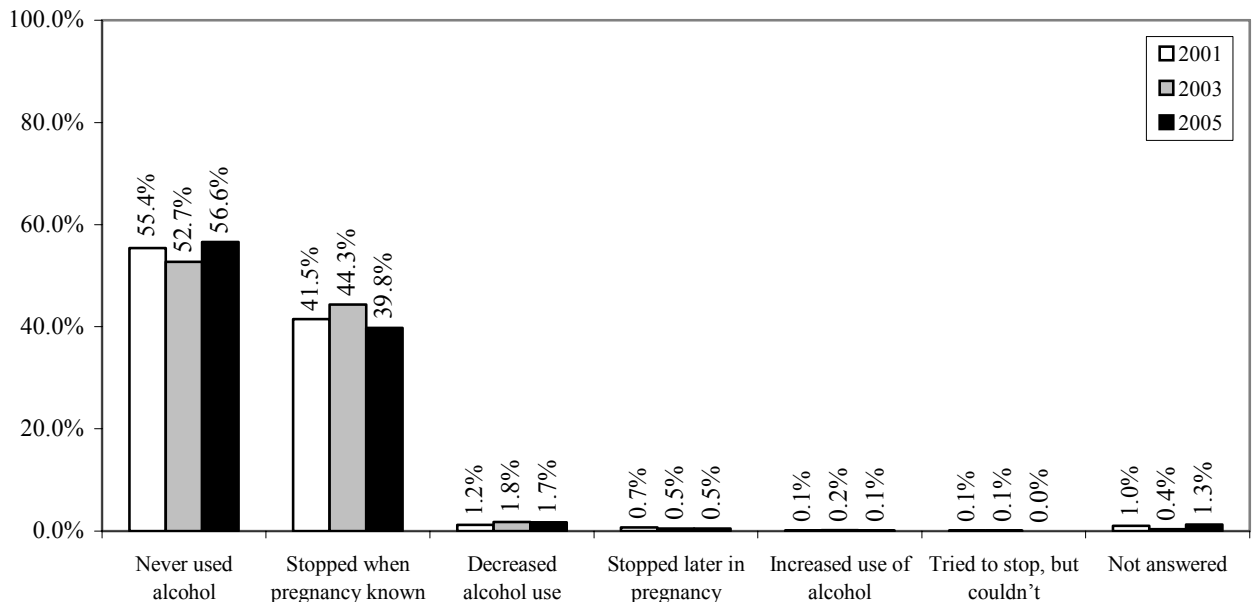
Alcohol Use During Pregnancy

When a pregnant woman drinks wine, beer or liquor the alcohol easily passes across the placenta to the developing baby. The damage caused by the alcohol is called Fetal Alcohol Syndrome or FAS. FAS is 100 percent preventable when a pregnant woman abstains from alcohol. There is no cure for FAS. Alcohol consumption during pregnancy may also result in miscarriage, stillbirth, and premature delivery.

Over half of the women or 56.6 percent surveyed said that they did not use alcohol at all during their pregnancy, while 39.8 percent reported that they stopped consuming alcohol as soon as they knew they were pregnant.

Overall, 77.9 percent of the survey respondents remember a doctor, nurse or other health care professional giving them information on the dangers of drinking alcohol while pregnant.

Figure 11: Alcohol Use During Pregnancy



Source: South Dakota Department of Health

Folic Acid

This member of the vitamin B family has been shown to be useful during pregnancy by helping to prevent neural tube defects in the baby.

Table 11: Multi-Vitamin or Folic Acid Supplement Use

Yes	58.9%
No	35.3%
Didn't know I should	5.5%
Not answered.....	0.3%

Source: South Dakota Department of Health

Vitamins and Folic Acid Supplements

In the three months prior to pregnancy, 35.3 percent of the women surveyed had not taken a folic acid supplement or multi-vitamin with folic acid. However, 58.9 percent of the women had taken vitamins daily.

When asked about information received from a healthcare provider, 83 percent of the women reported they were told about the importance of folic acid in food or vitamins to help prevent birth defects.

Since the 2001 survey, multi-vitamin or folic acid supplement use has increased from 46.9 percent to 53.1 percent in 2003 to 58.9 percent in 2005. This is a 12 percent increase during this time period.

Healthy People 2010

Objective 16-16a is to increase to 80.0 percent the consumption of at least 400 micrograms of folic acid each day from fortified foods or dietary supplements by non-pregnant women aged 15-44 years.

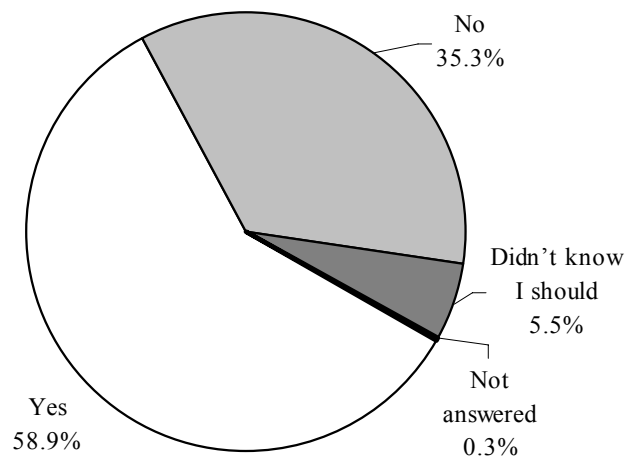
Source: U.S. Department of Health and Human Services

Department of Health Activities

► The South Dakota Department of Health encourages all women of child-bearing age to take folic acid. Women who participate in department programs such as WIC, Baby Care, and Family Planning are encouraged to consume folic acid daily.

► For further information contact Kristin Biskeborn, State Nutritionist, (605) 734-4551

Figure 12: Multi-Vitamin or Folic Acid Supplement Use



Source: South Dakota Department of Health

Oral Health

When a pregnant woman takes care of her health, including her teeth and gums, she is helping both herself and her unborn child. By taking care of her teeth and gums, she may be giving her baby a better chance to be born on time and at a healthy birth weight.

Pregnant women with gum disease are much more likely to have premature babies with low birthweight. Scientists believe that because of gum disease, chemicals produced by the body may reach the womb, where the unborn baby is growing, causing the mother to go into labor before her baby has fully developed.

Every expectant mother should have a dental exam prior to or very early in her pregnancy. All needed dental work should be managed early, because interventions are possible to control gum disease and inflammation. This is a good opportunity to change unhealthy habits that may affect her oral health and the health of her baby.

After the baby is born, the germs that cause tooth decay can be passed to babies by their mothers or caregivers. Therefore, it is important for new mothers to maintain a healthy mouth and also to remember not to put baby's items in their own mouth or allow their baby to put their fingers into mouths of adults.

Of the 20.4 percent who reported having problems with their teeth or gums, 11 percent stated that their babies were either born more than 3 weeks before the due date or were underweight, with almost half reporting both conditions.

Of the women surveyed, 60.8 percent had been to the dentist in the past year. Over half of them had their teeth cleaned and 41.6 percent remember receiving information about how to care for their teeth and gums. The percentage of survey respondents who had no problems with their teeth or gums during their pregnancy was 79.3 percent.

Table 12: Last Visit to Dentist or Dental Office

Within the past year.....	60.8%
Within the past 2 years	16.8%
Within the past 5 years	11.5%
5 years or more	8.8%
Never	0.2%

Source: South Dakota Department of Health

Table 13: How Long Since Last Teeth Cleaning

Within the past year.....	55.0%
Within the past 2 years	17.6%
Within the past 5 years	13.8%
5 years or more.....	9.7%
Never.....	1.6%
Not answered or unknown	2.3%

Source: South Dakota Department of Health

Table 14: Problems With Teeth or Gums During Pregnancy

No	79.3%
Yes	20.4%
Not answered.....	0.3%
<i>Able to See a Dentist for Treatment</i>	
Yes	50.8%
No	48.2%
Not answered.....	1.0%

Source: South Dakota Department of Health

Expectant mothers:

- ✓ See your dentist early
- ✓ Tell your dentist that you are pregnant
- ✓ Brush with a soft toothbrush at least twice a day
- ✓ Floss daily

Department of Health Activities

► The Oral Health Program coordinates programming to increase awareness of the importance of oral health and preventive care, improve access to dental care, and promote the use of innovative and cost effective approaches to oral health promotion and disease prevention

► For further information contact Julie Ellingson, Oral Health Coordinator, (605) 773-3737.

Fish Consumption

Fish can be an important part of a balanced diet for pregnant women. It is a good source of high quality protein and other nutrients and is low in fat.

However, some fish contain high levels of a form of mercury called methylmercury that can harm an unborn child's developing nervous system if eaten regularly. By being informed about methylmercury and knowing the kinds of fish that are safe to eat, any harm to an unborn child can be prevented and the health benefits of eating seafood can still be obtained.

Consumption of freshwater fish caught by family and friends should be limited to one meal per week. For adults one meal is six ounces of cooked fish or eight ounces uncooked fish; for a young child one meal is two ounces cooked fish or three ounces uncooked fish. Twelve ounces per week of cooked commercial fish can safely be eaten. Shark, swordfish, king mackerel, or tilefish should never be consumed by women who are pregnant or could become pregnant, nursing mothers and young children as they contain higher levels of methylmercury.

Of the survey respondents, 44.7 percent reported eating fish in the last two months of their pregnancy. Of those consuming fish, 69.4 percent had 4 or less meals in this time. A total of only 3 meals were reported as either shark, swordfish, king mackerel or tilefish. Over sixty percent (66.5) of the meals were estimated to be 4 ounces or less.

Forty-five percent of the women remember receiving information about eating certain kinds of fish compared to 31.9 percent in 2003.

Table 15: Fish Consumed in Last Two Months of Pregnancy

No	55.1%
Yes	44.7%
Not answered.....	0.3%

Source: South Dakota Department of Health

Table 16: Meals Consumed of Different Types of Fish

Pollock, Cod, Herring, Shrimp, Salmon or Crab	41.1%
Red Snapper, Marlin, Orange Roughy, Saltwater Bass, Lobster or Tuna	33.4%
Northern Pike, Walleye, or Bass	13.6%
Crappie, Bluegill, Perch or Channel Catfish.....	4.1%
Bullhead, Carp or Trout.....	1.2%
Swordfish, King Mackerel, Shark, or Tilefish	0.2%
Other	6.4%

Source: South Dakota Department of Health

Table 17: Size of Meals

2 ounces	23.4%
4 ounces	43.1%
6 ounces	23.7%
8 ounces	7.9%
10 ounces	1.2%
More than 10 ounces.....	0.5%

Source: South Dakota Department of Health

For more information about the risks of mercury in seafood call toll-free 1 (888) SAFEFOOD, U. S. Food and Drug Administration Center for Food Safety and Applied Nutrition Food Information Line 24 hours a day or visit FDA's Food Safety Website www.cfsan.fda.gov/seafood1.html.

Also check with state or local health departments to see if there are special advisories on fish caught from local waters. South Dakota's fish advisory web site is www.state.sd.us/doh/fish.

Mother's Health Conditions

Overall, 22.2 percent, or 208 of the survey respondents reported having health conditions before or during their pregnancy. Of those surveyed, 10.4 percent reported high blood pressure, 4.2 percent reported diabetes and 3.1 percent had inflamed gums. Another 7.3 percent reported other conditions including anemia, asthma, strep infections, thyroid problems, and preterm labor.

Table 18: Health Conditions Before or During Pregnancy

<i>High blood pressure</i>	10.4%
<i>Other</i>	7.3%
<i>Diabetes</i>	4.2%
<i>Inflamed Gums</i>	3.1%
<i>Epilepsy</i>	0.6%
<i>PKU</i>	0.0%

Source: South Dakota Department of Health

Diabetes

Diabetes is a disorder in which the body does not produce enough insulin or does not utilize insulin properly. Insulin is a hormone that allows sugar to enter cells, where it can be turned into energy.

Women with poorly controlled diabetes are several times more likely to have a baby with a serious birth defect, such as a heart defect or neural tube defect. They also are at increased risk of miscarriage and stillbirth and are at risk for delivering a baby that is extremely large, approaching 10 pounds or more.

Hypertension (High Blood Pressure)

Blood pressure is the measurement of the pressure of blood pushing against the walls of the blood vessels as it is pumped through the body. The systolic pressure, or upper number, measures the pressure during a heartbeat. The diastolic pressure, or lower number, measures the pressure between heartbeats.

High blood pressure during pregnancy can cause a decrease in the blood and oxygen supply available to mother and baby. In the mother it can lead to kidney problems, breathing problems,

seizures, strokes and even death. Babies may have problems with growing, getting enough oxygen and other complications.

Inflamed Gums

Growing evidence suggests a link between gum disease and premature, underweight births. Pregnant women who have gum disease may be more likely to have a baby that is born too early and too small.

Of the 3.1 percent who reported inflamed gums, 38 percent stated they were unable to see a dentist for treatment. An additional 20.7 percent did not state whether they were able to see a dentist for treatment. This was also the percentage (20.7) who reported having an underweight or premature baby.

Epilepsy (Seizure Disorder)

Epilepsy is a disorder of brain function characterized by recurrent seizures. Pregnancy can cause a decrease or increase in seizures and for some women there is no change in seizure activity.

Women with epilepsy taking anticonvulsant medication have a 2-3 times greater risk of having babies with birth defects. Women who have epilepsy and are no longer taking medication have a 1-2 times greater risk of having an infant with birth defects.

PKU (Phenylketonuria)

PKU is an inherited disorder that affects the way the body processes protein. If untreated, it causes mental retardation. Brain damage can be prevented if the baby is treated with a special diet that is begun in the first three weeks of life.

Women with PKU should ideally follow the special diet throughout their life. If they continue the diet during their pregnancy, they can have a healthy baby. If they do not stick to the diet, levels of the protein phenylalanine can become too high and result in damage to the developing baby. The baby can be born with mental retardation, small head size, heart defects, and low birth weight. None of the survey respondents reported having PKU.

Prenatal Care

Overall, 83.8 percent of the women obtained prenatal care as early as they wanted. In regards to income, 22 percent of women in the \$10,000 to \$19,999 income bracket did not have prenatal care as early as they wanted with the most common reason being that they were waiting to qualify for Medicaid.

Of those women who did not receive prenatal care as early as they wanted 20.4 percent responded that their doctor didn't want to see them until they were 12 weeks into the pregnancy. The second most common reason provided by survey respondents was that they didn't know they were pregnant. In 2003 "didn't know they were pregnant" was the highest reason for not getting prenatal care early at 22.5 percent.

Other reasons given by respondents for not receiving care earlier included not having insurance and they didn't want anyone to know they were pregnant.

Table 19: Did Anything Keep You From Getting Prenatal Care as Early as You Wanted?

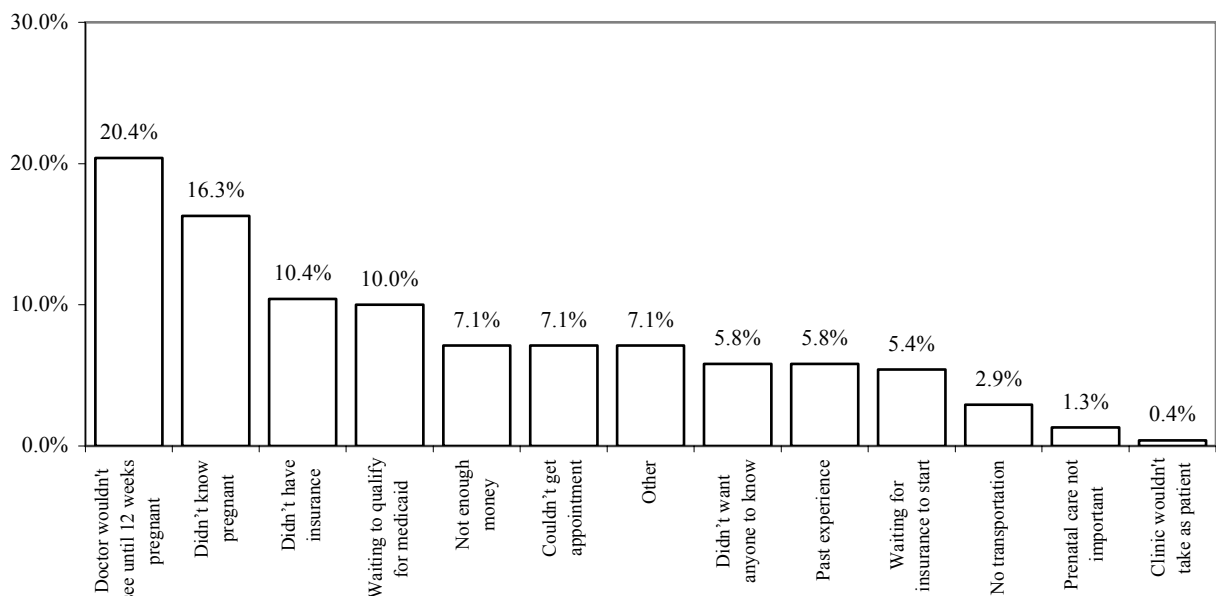
No.....	83.8%
Yes.....	15.5%
Not answered.....	0.7%

Reasons Women Did Not Get Prenatal Care Earlier

<i>Doctor didn't want to see me until</i>	
<i>12 weeks into pregnancy.....</i>	20.4%
<i>Didn't know I was pregnant.....</i>	16.3%
<i>Didn't have insurance.....</i>	10.4%
<i>Waiting to qualify for Medicaid.....</i>	10.0%
<i>Not enough money to pay.....</i>	7.1%
<i>Couldn't get an appointment.....</i>	7.1%
<i>Other.....</i>	7.1%
<i>Didn't want anyone to know I was</i>	
<i>pregnant.....</i>	5.8%
<i>Had been pregnant before and so</i>	
<i>knew what it was all about.....</i>	5.8%
<i>Waiting for insurance to start.....</i>	5.4%
<i>No way to get to clinic or doctor's</i>	
<i>office.....</i>	2.9%
<i>Don't think prenatal care is important.....</i>	1.3%
<i>Couldn't get doctor or clinic to take</i>	
<i>as a patient.....</i>	0.4%

Source: South Dakota Department of Health

Figure 13: Reasons Women Did Not Get Prenatal Care Earlier



Source: South Dakota Department of Health

Overall, 89.4 percent of the survey participants started prenatal care in their first trimester. Of those reporting barriers to receiving prenatal care as early as they wanted in their pregnancy, 74.5 percent began prenatal care in the first trimester of their pregnancy and 19.3 percent began care in the second trimester.

However, 92.3 percent of the women who reported no barriers began prenatal care in the first trimester of their pregnancy and 5.9 percent began care in the second trimester.

The 0.3 percent who reported no prenatal care cited barriers that included not knowing they were pregnant, didn't think prenatal care was important, waiting to qualify for Medicaid, and had no insurance.

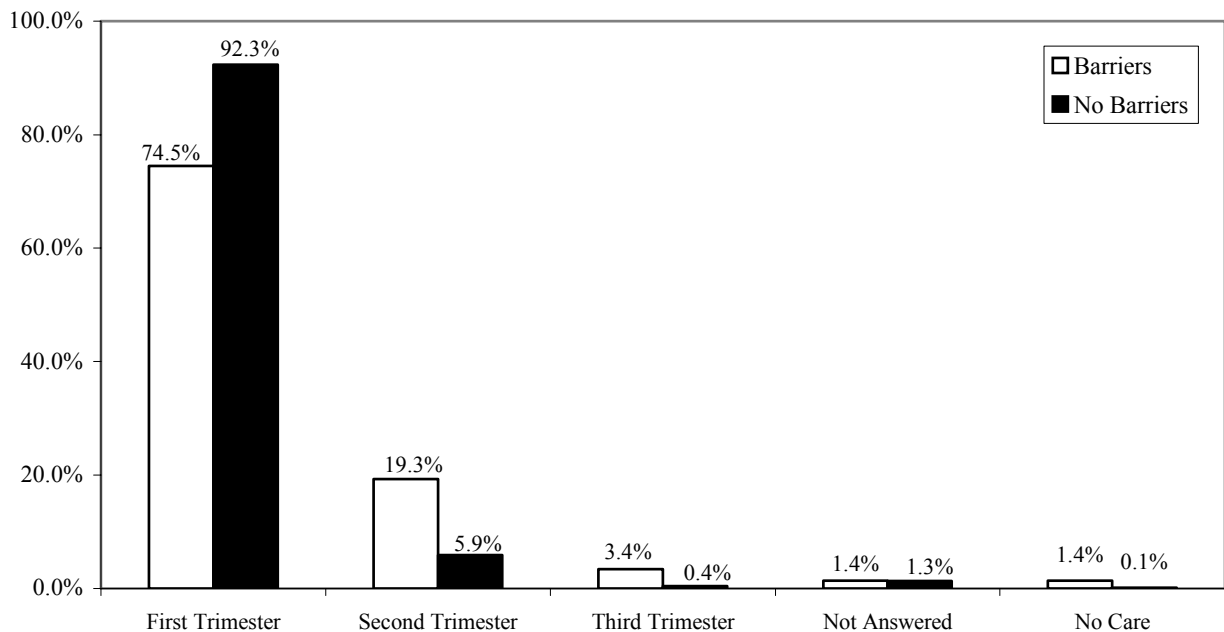
The average of the participants for the last three surveys who started prenatal care in the first trimester is 89.7 percent with an average of 12.5 percent of those stating they had barriers to getting early prenatal care.

Healthy People 2010

Objective 16-16a is to increase maternal prenatal care beginning in first trimester of pregnancy to 90%.

Source: U.S. Department of Health and Human Services

Figure 14: Trimester Prenatal Care Began and Barriers to Prenatal Care



Source: South Dakota Department of Health

Table 20: Did Anything Keep You From Having as Many Prenatal Visits as You Wanted?

No.....	94.7%
Yes.....	4.8%
Not answered	0.5%

Reasons Women Did Not Have as Many Prenatal Visits as Desired

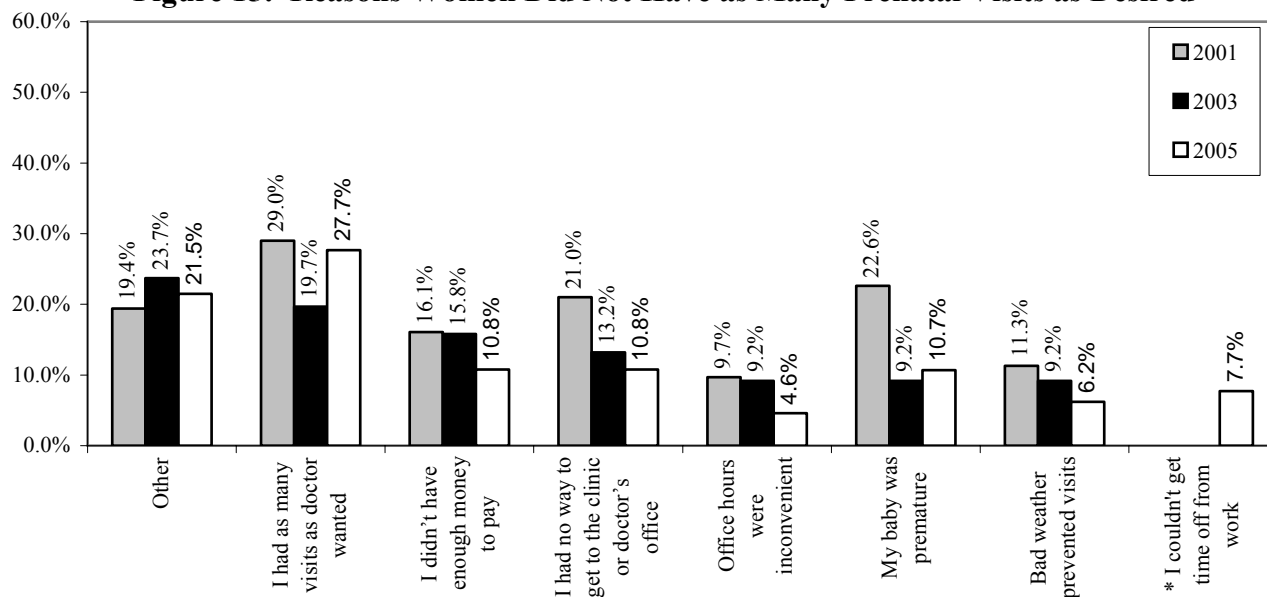
<i>I had as many visits as doctor wanted.....</i>	<i>27.7%</i>
<i>Other.....</i>	<i>21.5%</i>
<i>I didn't have enough money to pay.....</i>	<i>10.8%</i>
<i>I had no way to get to the clinic or doctor's office.....</i>	<i>10.8%</i>
<i>My baby was premature</i>	<i>10.7%</i>
<i>I couldn't get time off from work.....</i>	<i>7.7%</i>
<i>Bad weather prevented visits.....</i>	<i>6.2%</i>
<i>Office hours were inconvenient.....</i>	<i>4.6%</i>

Source: South Dakota Department of Health

The majority of women or 94.7 percent reported that nothing kept them from having as many prenatal visits as they wanted.

The most common reasons in the “Other” category was that they had other children to care for and couldn’t make visits.

Figure 15: Reasons Women Did Not Have as Many Prenatal Visits as Desired



NOTE: * New answer choice in 2005.

Source: South Dakota Department of Health

Department of Health Activities

► Through DOH programs such as WIC, Family Planning and Baby Care early and adequate prenatal care is promoted. The programs refer pregnant women seen at their sites to medical providers of prenatal care as well as referring them to financial resources such as Medicaid.

► The Department of Health has collaborated with physicians to identify and reduce the barriers for women accessing prenatal care in their first trimester of pregnancy.

Method of Payment for Prenatal Care

For the total population, personal income (cash, check or credit card) and insurance were the most common forms of payment. Medicaid was also a common response. Of the 26.1 percent on Medicaid, 20.8 percent were on the pregnancy only program with the other 5.3 percent on full Medicaid coverage.

Overall, 14.3 percent still owed money for their prenatal care at the time of the survey. Of these, 62.7 percent indicated both insurance and personal income as method of payment with an additional 21.6 percent indicating one or the other method as payment.

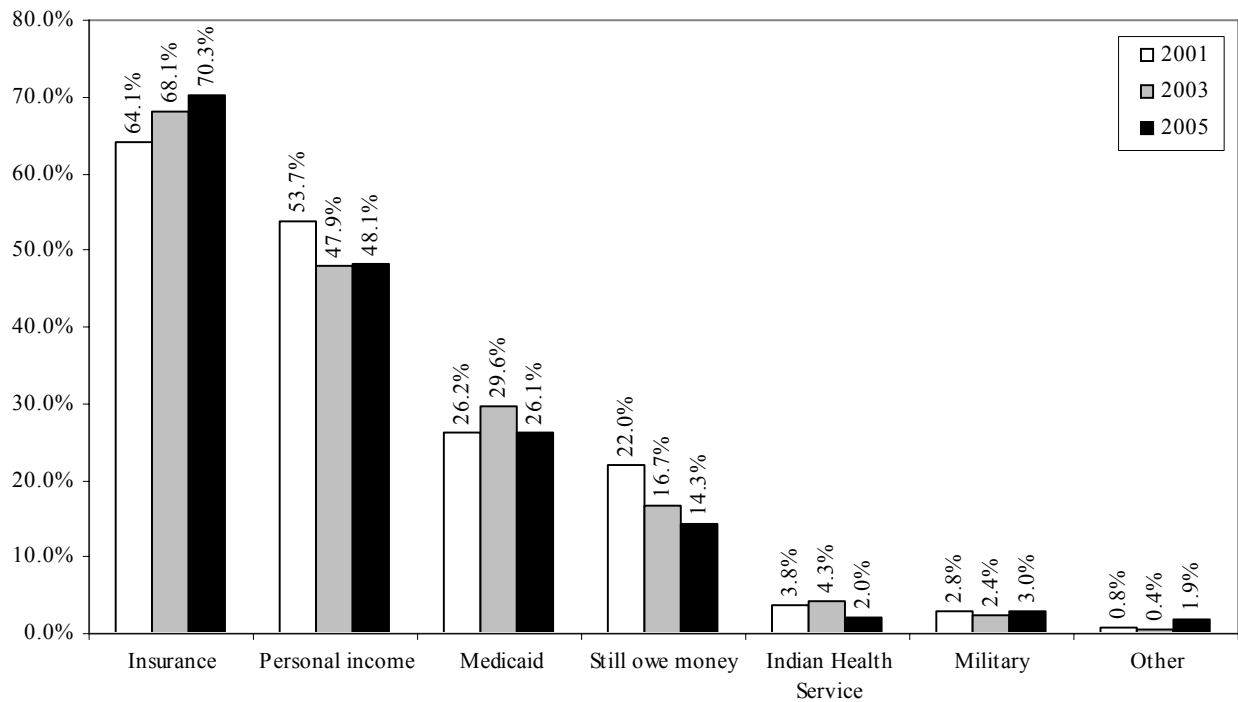
Of those that still owed money for prenatal care, 31.3 percent said the baby was between two and four months old, 36.6 percent said the baby was between four and six months old, 28.4 percent said the baby was between six and eight months old and the remaining 3.7 percent did not state how old the baby was at the time of the survey.

Table 21: Method of Payment for Prenatal Care

Insurance.....	70.3%
Personal income.....	48.1%
Medicaid.....	26.1%
Still owe money	14.3%
Military.....	3.0%
Indian Health Service.....	2.0%
Other	1.9%

Source: South Dakota Department of Health

Figure 16: Method of Payment for Prenatal Care



Source: South Dakota Department of Health

Table 22: Weight Gain During Pregnancy

<i>Lost Weight.....</i>	<i>1.7%</i>
<i>0-15 pounds gained.....</i>	<i>10.8%</i>
<i>16-25 pounds gained.....</i>	<i>22.2%</i>
<i>26-40 pounds gained.....</i>	<i>40.1%</i>
<i>41-60 pounds gained.....</i>	<i>18.2%</i>
<i>61 + pounds gained.....</i>	<i>4.1%</i>
<i>Not answered.....</i>	<i>3.0%</i>

<i>*Gained more than recommended weight.....</i>	<i>55.2%</i>
<i>*Gained recommended weight... Gained less than recommended weight.....</i>	<i>20.8%</i>
<i>Lost Weight.....</i>	<i>18.9%</i>
<i>Not answered.....</i>	<i>1.7%</i>
	<i>3.4%</i>

** Based on singleton pregnancy.*

Source: South Dakota Department of Health

Weight Gain During Pregnancy

Overall, 78.1 percent of the women surveyed said that a doctor, nurse or other health care professional talked to them about what they should eat during pregnancy.

Healthy eating is important during pregnancy because it increases the likelihood that the baby will be healthy. Women should eat a balanced diet and have an intake of adequate calcium before and during the pregnancy.

Prior to pregnancy, 54.8 percent of the respondents had normal weight defined by body mass index. This was calculated from data women supplied about their height and weight. Please see the glossary (page 59) for more information about body mass index, weight and ideal weight gain during pregnancy.

✓ According to survey responses, the percentage of low birth weight babies among those gaining less than their ideal pregnancy weight was 11.3 percent, compared to 6.2 percent among those who gained the minimum recommended weight.

✓ While it is important for women to gain at least the minimum weight recommendations during pregnancy, excessive weight gain should be discouraged, as women tend to retain weight gain thus contributing to the obesity epidemic.

Healthy People 2010

Objective 16-12 (Developmental) Increase the proportion of mothers who achieve a recommended weight gain during their pregnancies.

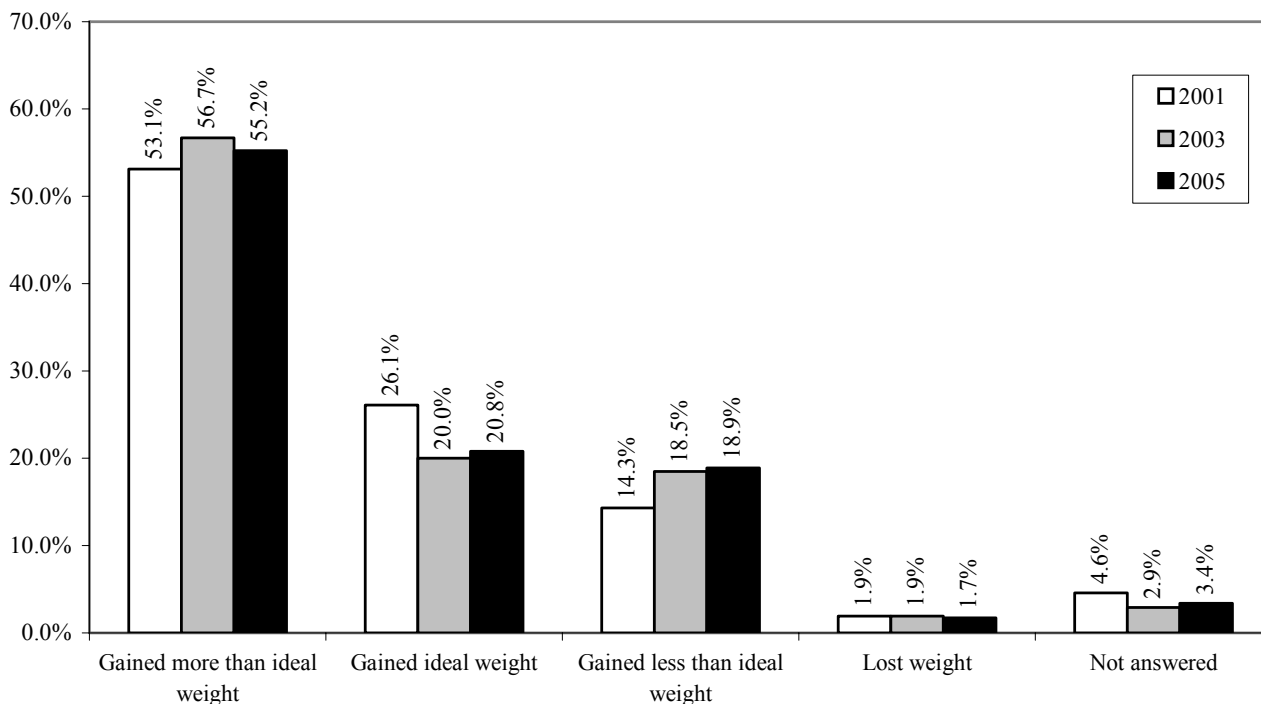
Source: U.S. Department of Health and Human Services

Department of Health Activities

► The South Dakota Department of Health encourages all women to gain an appropriate amount of weight during pregnancy based upon their pre-pregnancy weight and the number of fetuses the women is carrying. All women who participate in WIC, Baby Care and Bright Start Home Visits have their weight assessed and weight gain recommendations are made. Women are provided nutrition counseling to help them achieve proper weight gain. Referrals are made when indicated.

► For further information contact Kristin Biskeborn, State Nutritionist, (605) 734-4551.

Figure 17: Weight Gain During Pregnancy



Source: South Dakota Department of Health

Regular, moderate physical activity during pregnancy may:

- Help you and your baby to gain the proper amounts of weight
- Reduce the discomforts of pregnancy such as backaches, leg cramps, constipation, bloating, and swelling
- Improve your mood, energy level, and feelings about the way you look
- Strengthen your muscles and improve your blood flow
- Improve your sleep
- Help you have an easier, shorter labor
- Help you to recover from delivery and return to a healthy weight faster.

Physical Activity

The 2005 survey includes new questions on physical activity. Participants were asked how often they participated in a physical activity or exercise for a total of 30 minutes or more per day the three months before they became pregnant and during the last three months of their pregnancy.

Overall, the majority stated that they participated 1 to 2 days a week, both before and during the last three months of their pregnancy, 32.3 percent, and 34.1 percent, respectfully.

The South Dakota Department of Health recommends daily physical activity to enhance health. Almost all women can and should be physically active during pregnancy. Talk to your health care provider first, particularly if you have high blood pressure, diabetes, anemia, bleeding, or other disorders, or if you are obese or underweight.

Whether or not you were active before you were pregnant, ask your health care provider about a level of exercise that is safe for you. Aim to do at least 30 minutes of a moderate activity (one that makes you breathe harder but does not overwork or overheat you) on most days of the week.

Table 23: Did You Participate in Any Physical Activity Before or During Pregnancy?

	Three Months Before Your Pregnancy	Last Three Months of Your Pregnancy
<i>Less than 1 day per week</i>	27.1%	32.7%
<i>1 to 2 days per week</i>	32.3%	34.1%
<i>3 to 4 days per week</i>	29.6%	18.9%
<i>5 or more days per week</i>	10.7%	7.6%
<i>Not answered</i>	0.3%	0.4%
<i>Told by a doctor, nurse, or other health care worker not to exercise.</i>		6.3%

Source: South Dakota Department of Health

- ▼ Follow these safety precautions while being active during your pregnancy:
 - ◆ Choose moderate activities that are unlikely to injure you, such as walking, aqua aerobics, swimming, yoga, or using a stationary bike.
 - ◆ Stop exercising when you start to feel tired, and never exercise until you are exhausted or overheated.
 - ◆ Drink plenty of water.
 - ◆ Wear comfortable clothing that fits well and supports and protects your breasts.
 - ◆ Stop exercising if you feel dizzy, short of breath, pain in your back, swelling, numbness, sick to your stomach, or if your heart is beating too fast or at an uneven rate.

- ▼ For your health and safety, and for the health of your baby, there are certain physical activities that you should not do while you are pregnant. Some are listed below. Talk to your health care provider about other physical activities that you should avoid during your pregnancy.
 - ◆ Avoid being active outside during hot weather.
 - ◆ Avoid steam rooms, hot tubs, and saunas.
 - ◆ Avoid physical activities, such as certain yoga poses, that call for you to lie flat on your back after 20 weeks of pregnancy.
 - ◆ Avoid contact sports such as football and boxing, and other activities that might injure you such as horseback riding.
 - ◆ Avoid activities that make you jump or change directions quickly such as tennis or basketball. During pregnancy, your joints loosen and you are more likely to hurt yourself when doing these activities.

Sources of Pregnancy Information

When asked to select the three most useful sources for education about pregnancy, the most common responses were the woman's doctor, information from books and magazines and previous experience with pregnancy.

Other common responses included packets of information handed out at the doctor's office or clinic, family and friends and prenatal classes.

Table 24: Sources of Pregnancy Information

<i>Doctor</i>	67.5%	<i>WIC staff</i>	10.8%
<i>Books, magazines and other</i>	57.1%	<i>Midwife</i>	7.1%
<i>Previous experience with pregnancy</i> ...	45.8%	<i>Public health nurse or</i>	
<i>Family and friends</i>	31.2%	<i>community health nurse</i>	
<i>Packet of information at</i>		<i>or baby care nurse</i>	3.8%
<i>doctor's office or clinic</i>	27.1%	<i>Other</i>	2.8%
<i>Internet</i>	16.7%	<i>New Beginnings</i>	
<i>Prenatal classes</i>	16.2%	<i>prenatal newsletter</i>	2.2%
<i>Clinic nurse</i>	16.1%	<i>Healthy Start staff</i>	0.7%

Source: South Dakota Department of Health

Department of Health Activities

► Through Department of Health programs such as WIC, Baby Care and Bright Start Home Visitations information is provided to women receiving these services. In addition, the Department of Health purchases and develops client education materials with pregnancy information. The Department of Health also makes the New Beginnings Prenatal Newsletter available to pregnant women accessing Department of Health programs.

Information Received By Respondents

The most common topics discussed with women were the importance of folic acid (83 percent), preterm labor signs (83.8 percent), and aspirin and other over-the-counter medicines (79.3 percent). As in 2003, the only two topics that were not

discussed with at least 50 percent of the survey respondents were how to care for mother's teeth and gums and eating certain kinds of fish. Physical activity information is new this year and was discussed with 78.6 percent of the survey respondents.

Table 25: Summary of Information Received Before, During or After Pregnancy

<i>Preterm labor signs</i>	83.8%	<i>Not changing cat litter</i>	61.1%
<i>The importance of folic acid</i>	83.0%	<i>Avoiding paint fumes, other</i>	
<i>Aspirin and other</i>		<i>chemicals and radiation</i>	60.3%
<i>over-the-counter medicine</i>	79.3%	<i>Marijuana, crack cocaine, meth</i>	
<i>Physical activity</i>	78.6%	<i>or other street drugs</i>	55.4%
<i>What I should eat</i>	78.1%	<i>HIV/AIDS</i>	55.1%
<i>Drinking alcohol</i>	77.9%	<i>Chewing tobacco</i>	54.1%
<i>Smoking</i>	77.2%	<i>Thoroughly cooking meats</i>	51.7%
<i>Possible family history of</i>		<i>Eating certain kinds of fish</i>	45.0%
<i>birth defects</i>	74.0%	<i>How to care for my</i>	
<i>Wearing safety belts</i>	65.5%	<i>teeth and gums</i>	41.6%

Source: South Dakota Department of Health

Seat Belts

There is no evidence that seat belts hurt the unborn baby during a collision. Mothers who wear seat belts during pregnancy suffer fewer injuries and deaths than those who do not wear them.

Of the survey respondents, 65.5 percent reported that a doctor, nurse or other health professional had talked to them about wearing a safety belt during their pregnancy.

Wearing Seat Belts Correctly

- *Wear both the lap and shoulder belt, adjusting both as snugly as comfortably possible.*
- *Place the lap belt under the abdomen as low on the hip as possible and across the thighs. Never place the lap portion of the belt above the abdomen.*
- *Position the shoulder belt between the breasts. The belt should cross the shoulders without chafing the neck.*

Healthy People 2010

Objective 15-20 Increase use of child restraints to 100%.

Source: U.S. Department of Health and Human Services

Table 26: Baby Came Home From Hospital in a Car Safety Seat

Yes	99.3%
No	0.2%
Not answered.....	0.5%

Currently Using a Car Safety Seat

Always.....	95.3%
Sometimes.....	4.5%
Never.....	0.0%
Not answered	0.2%

Reasons for Sometimes Not Using a Car Safety Seat

<i>Baby requires feeding or diaper change.....</i>	<i>83.3%</i>
<i>Baby is crying.....</i>	<i>40.5%</i>
<i>Takes too much time</i>	<i>11.9%</i>
<i>Other.....</i>	<i>7.1%</i>

Source: South Dakota Department of Health

Car Safety

Almost all or 99.3 percent of the mothers surveyed reported that their baby had been taken home from the hospital in a car safety seat.

Again, almost all or 95.3 percent of babies were put into a car safety seat when traveling. In the back seat facing backward is the safest place for the baby to ride and 93.6 percent of babies rode in this position.

The percent of respondents who stated they sometimes do not use a car safety seat because it takes too much time is 11.9 percent, down from 79.4 percent in 2003 who stated this.

Of all the survey participants, 38.6 percent purchased their baby's current car safety seat new. Written instructions were the source of information for the proper use of the car safety seat 59.7 percent of the time.

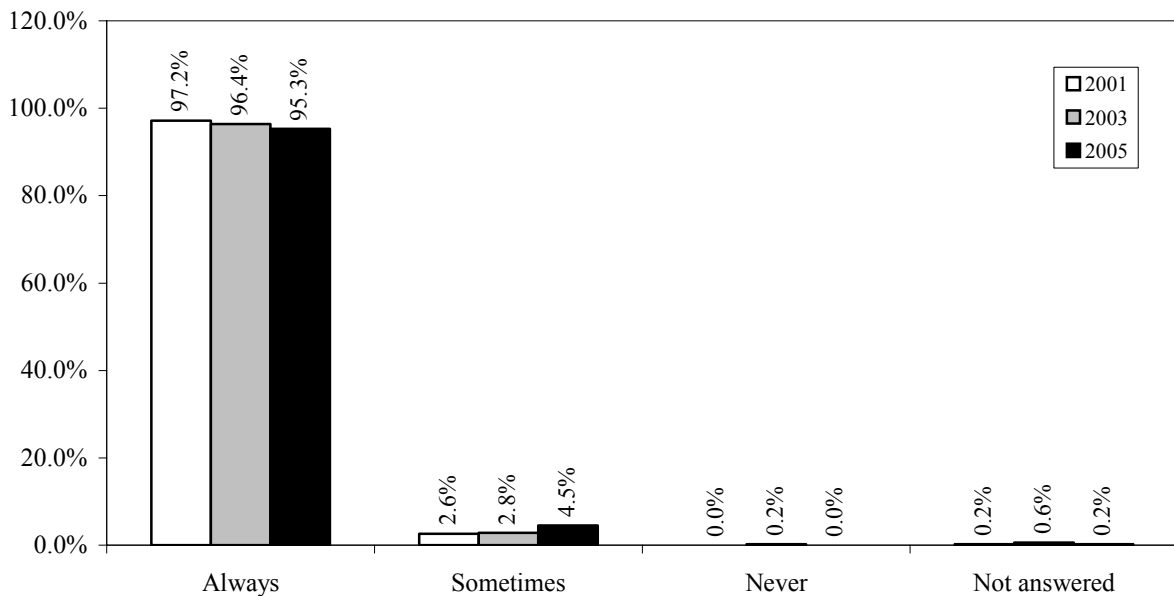
Table 27: Source of Current Car Safety Seat

<i>Purchased new</i>	38.6%
<i>Previous child's</i>	31.7%
<i>Used from family or friend</i>	10.7%
<i>Received as gift</i>	6.7%
<i>Governor's Car Safety Seat Program</i>	1.8%
<i>Given by hospital</i>	4.8%
<i>Purchased used</i>	5.2%
<i>Not answered</i>	0.4%

Source: South Dakota Department of Health

Overall, 91 percent of the respondents stated that a doctor, nurse or other health care professional discussed the use of a car safety seat with them.

Figure 18: Use of Car Safety Seat



Source: South Dakota Department of Health

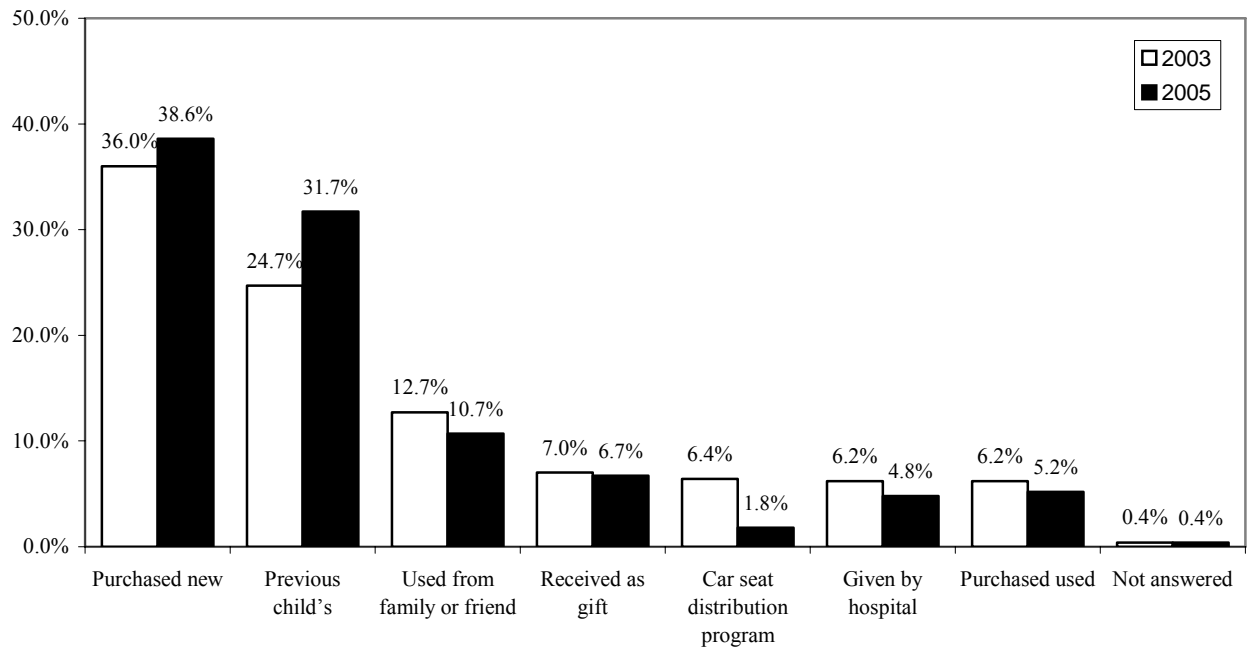
Department of Health Activities

► The South Dakota Department of Health collaborates with the Office of Highway Safety in promoting child passenger safety and the Governor's Child Safety Seat program in the state through the local Community Health Offices.

- In South Dakota, the Governor's Child Safety Seat Program through the Office of Highway Safety has child safety seats available for families that cannot afford one. Website: <http://www.state.sd.us/project8/>.
- It is a primary law in South Dakota that every child or youth 17 years and under must be properly restrained. Website: <http://state.sd.us/news/issues/21.pdf>.

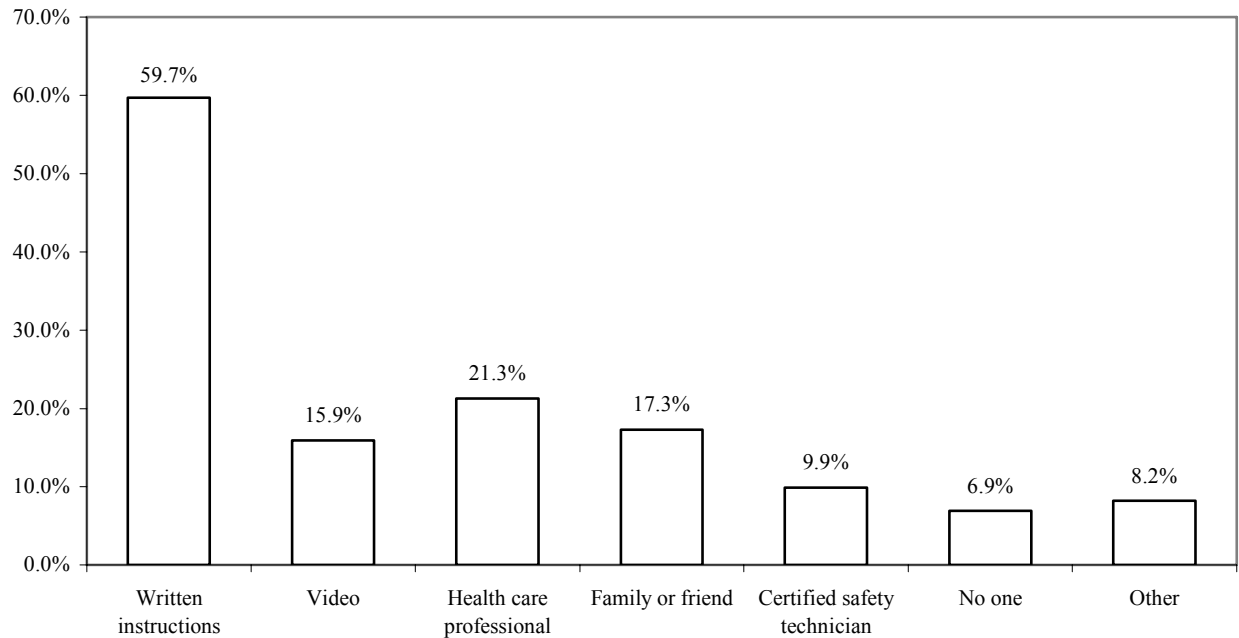
► For further information contact Emergency Medical Services for Children, USD School of Medicine, (605) 328-6668.

Figure 19: Source of Car Safety Seat



Source: South Dakota Department of Health

Figure 20: Current Car Safety Seat Instruction Source



Source: South Dakota Department of Health

Table 28: Participation in Assistance Programs

WIC	26.7%
Medicaid	25.6%
Pregnancy only program	20.2%
Full coverage	5.4%
Food Stamps	8.5%
Indian Health Service	3.7%
Baby Care/ Case Management.....	1.7%
Healthy Start.....	2.1%
Temporary Assistance for Needy Families.....	1.6%
Bright Start Home Visits.....	1.0%
Others.....	1.5%

Participation in State and Federal Programs

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) was the program utilized by the highest percentage of respondents with 26.7 percent of mothers and babies enrolled. Of the respondents who said they were enrolled in WIC, 83.2 percent stated they were also in another program, including Medicaid and Indian Health Service.

At 25.6 percent, Medicaid was the second most common program utilized by survey respondents. This year respondents on Medicaid were asked if they were covered for full coverage (5.4 percent) or pregnancy only (20.2 percent). Overall, 64.6 percent of the survey participants were not in any of the listed programs.

WIC is a supplemental nutrition program that serves pregnant, breastfeeding and post-partum mothers, infants and children up to age 5. This is a USDA funded program. To qualify, the household income must be at or less than 185 percent of the poverty level and there must be a nutritional/medical risk. Participants receive nutrition education, prescribed foods and referrals.

► For further information contact Rhonda Buntrock, WIC Director, (605) 773-3737.

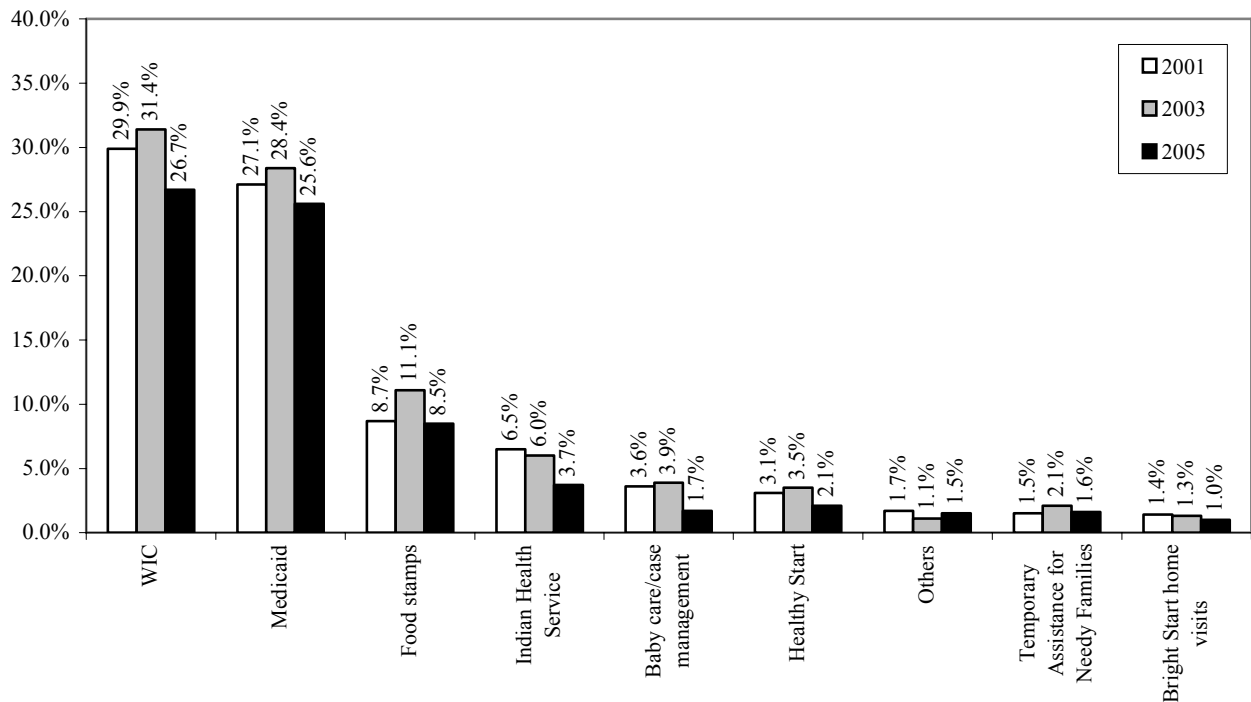
The Baby Care program is a cooperative effort between the Department of Health's Perinatal Program and the Department of Social Services' Medicaid program to provide case management services for high risk pregnant women. The goal of the program is to reduce maternal, neonatal, and infant mortality and morbidity in South Dakota. The purpose is to help pregnant women obtain needed services such as physician prenatal care and to provide nursing services to promote a healthy pregnancy and positive birth outcome.

► For further information contact Nancy Shoup, Perinatal Nurse Consultant, (605) 773-3737.

The Bright Start Home Visitation program, available in Rapid City or Sioux Falls, targets expectant mothers and is designed to help them improve their health in order to give birth to healthy babies. Parents and prospective parents receive home visits to learn how to care for their personal health needs, care for their child or children, stimulate their child's development and provide a nurturing home environment.

► For further information contact Darlene Bergeleen, Administrator, Office of Community Health Services, (605) 539-1866.

Figure 21: Participation in State and Federal Programs



Source: South Dakota Department of Health

HIV / AIDS

If a pregnant woman has HIV, her unborn baby can be infected. There are special medical treatments to reduce the chance that the baby will contract HIV.

Overall, 55.1 percent of the total survey respondents said that a doctor, nurse or health care professional provided information on HIV and AIDS.

Protecting an Unborn Baby From HIV / AIDS

- *Zidovudine therapy for infected pregnant women has been proven to reduce the proportion of infected babies.*
- *For treatment to be given with optimum success, the woman must be identified as HIV positive either before or as early in the pregnancy as possible.*
- *Delivery by Cesarean section may also reduce the risk of the baby contracting HIV.*

Department of Health Activities

► The South Dakota Department of Health HIV Program provides client education materials and technical assistance to prenatal care providers. The program collaborates with select providers to reduce barriers to prenatal screening for HIV.

► For further information contact Theron Hawley, HIV Prevention Coordinator, (605) 773-3737.

Teratogens

Paint Fumes, Chemicals and Radiation:

Avoiding paint fumes, chemicals, and radiation while pregnant was discussed with 60.3 percent of the survey respondents.

Over-the-Counter Medications:

The use of aspirin and other over-the-counter medications while pregnant was discussed with 79.3 percent of the survey respondents.

Pregnant women should consult their doctors before taking prescription medications, cold pills, cough medicine, aspirin, laxatives, sleeping pills, allergy medications, diet pills or any other medicines.

Illicit Drugs:

Babies can become addicted to drugs that the mother is taking. After birth, the baby may be shaky and show other signs of withdrawal. These babies may be delivered prematurely, have low birth weight and be very weak.

The effects of marijuana, crack, cocaine, meth, or other street drugs on the baby were discussed with 55.4 percent of the survey respondents.

Teratogens

A teratogen is any environmental agent that can potentially harm the developing fetus.

Teratogens Include:

- *Cigarette smoke*
- *Alcohol*
- *Prescribed or over-the-counter medication*
- *Vaccination, disease or infection before or during pregnancy*
- *Drugs*
- *Inhalants, pesticides, paints, varnishes or other chemicals*
- *Excessive heat or radiation or other physical agents*
- *Pollutants*

Illicit Drugs Include:

- *Crack/Cocaine*
- *Speed or Uppers*
- *Downers*
- *Heroin*
- *PCP/Angel Dust*
- *LSD*
- *Marijuana*
- *Methamphetamine (Meth)*

Preventing Toxoplasmosis and Other Infections During Pregnancy

- *Don't empty the cat's litter box*
- *Don't eat raw meat or undercooked meat*
- *Wash hands with soap after handling raw meat*
- *Wash all fruits and vegetables before eating them*
- *Don't feed the cat raw or undercooked meat*
- *Keep cats indoors; this prevents them from hunting birds or rodents that may be infected*
- *Wear gloves when gardening since outdoor soil may contain the parasite from cats*
- *Avoid children's sandboxes since a cat may have used them as litter boxes*

Signs of Preterm Labor

- *Contractions or cramps*
- *Bleeding*
- *Swelling or puffiness of the face or hands*
- *Pain which may be due to a possible urinary tract, bladder, or kidney infection*
- *Sharp or prolonged pain in the stomach*
- *Acute or continuous vomiting*
- *Low, dull backache*
- *Intense pelvic pressure*

Preventing Infections During Pregnancy

Toxoplasmosis is a disease caused by a parasite called *Toxoplasma gondii*. It is usually contracted by exposure to cat feces or eating raw, uncooked or undercooked meat. A woman contracting toxoplasmosis has about a 40 percent chance of passing it on to her unborn baby. Unborn children infected in early pregnancy are most likely to suffer severe health effects, which may include blindness, deafness, seizures, and mental retardation.

E-coli is the organism that leads to serious infection linked to undercooked meat, unpasteurized apple juice and unwashed fruits and vegetables. It is present in feces.

Overall, 51.7 percent of the survey respondents had been told to ensure that meats were thoroughly cooked compared to 50.6 percent in 2003. The percent of respondents being warned about changing cat litter increased from 56.0 percent to 61.1 percent in 2005.

Preterm Labor

Preterm labor is a serious complication of pregnancy. Understanding and recognizing preterm labor can help prevent premature births.

A doctor or nurse had discussed the signs of preterm labor with 83.8 percent of the survey respondents.

Table 29: Life Stressors

<i>Move to a new address</i>	30.0%
<i>Illness of a close family member</i>	24.0%
<i>Inability to pay bills</i>	18.5%
<i>More arguments than usual</i>	17.7%
<i>Someone close died</i>	16.5%
<i>Someone close had a problem with drinking/drugs</i>	11.4%
<i>Expectant mother lost her job</i>	7.4%
<i>Husband/partner lost his job</i>	6.9%
<i>Separation or divorce</i>	6.4%
<i>Husband or partner didn't want pregnancy</i>	5.7%
<i>Mother or husband/partner went to jail</i>	3.2%
<i>Involvement in a physical fight</i>	2.7%
<i>Homelessness</i>	1.1%

Source: South Dakota Department of Health

Life Stressors

Being under stress while pregnant can result in premature and low birth weight babies. Pregnancy can be a difficult time for some women. Survey respondents were asked to identify significant events (illness, divorce, job loss, arrest, death, etc.) which might have contributed to stress during the 12 month period before delivery.

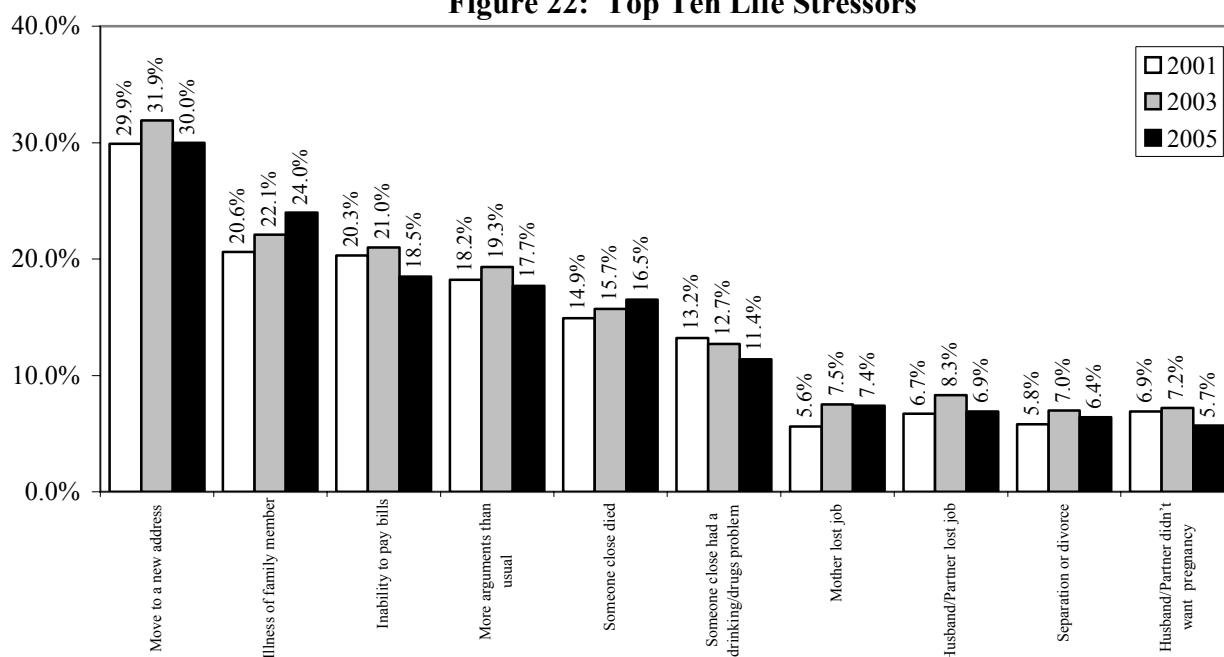
The top stressors of the survey respondents were moving to a new address, illness of a close family member, inability to pay bills, and arguing more than usual with a husband or partner. Other common stressors were the death of someone very close to the mother and someone close to the mother having a problem with drinking or drugs.

Department of Health Activities

► Through the Department of Health Baby Care and Bright Start Home Visitation programs, staff assist program participants to identify and access personal and community resources to deal with significant events occurring during the pregnancy.

► For further information contact Nancy Shoup, Perinatal Nurse Consultant, (605) 773-3737.

Figure 22: Top Ten Life Stressors



Source: South Dakota Department of Health

Prematurity and Low Birth Weight

Overall, 89.8 percent of the women said that their babies were not born more than three weeks before the due date and 93.9 percent of the babies did not have a low birth weight.

Women who smoked during pregnancy had a slightly higher rate of premature or low birth weight babies.

While 10.2 percent of the total survey respondents had premature babies, this figure increased to 11.2 percent among women who smoked while pregnant.

Just over six percent of the total survey respondents had babies with a low birth weight. This figure was 6.6 percent among women with one or more life stressors and 8.0 percent among women who smoked while pregnant.

Of the survey participants who had premature or underweight babies, 94.7 percent started prenatal care in the first trimester.

Survey respondents reporting babies with low birth weight~less than 5 pounds, 9 ounces6.1%

Survey respondents reporting babies born more than three weeks before due date10.2%

Survey respondents reporting babies both underweight and born more than three weeks before due date.....5.0%

Source: South Dakota Department of Health

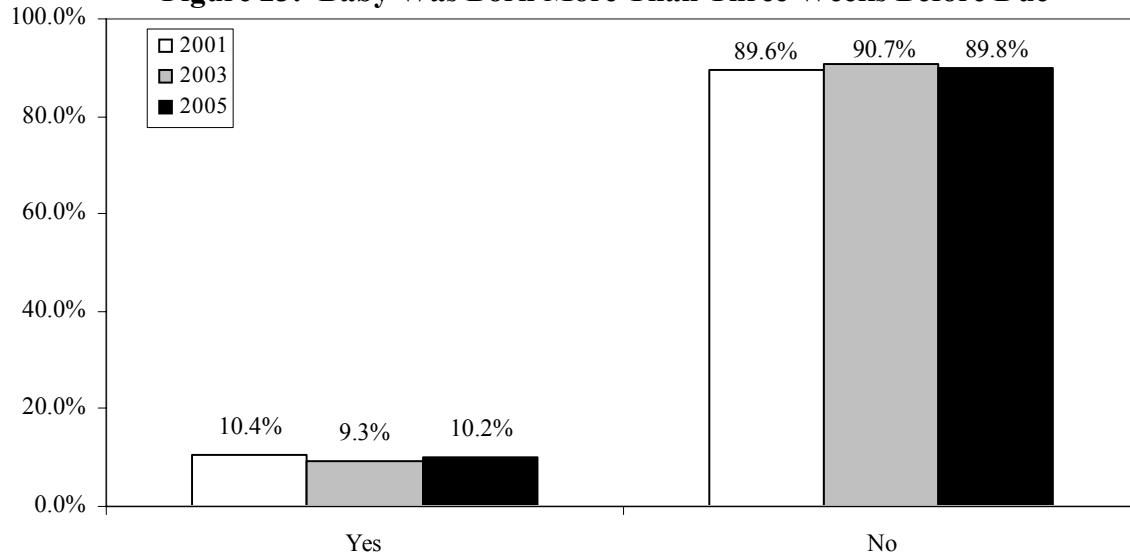
Healthy People 2010

Objective 16-10a is a reduction to 5% of low birth weight babies.

Objective 16-11a is to reduce total preterm births to 7.6%.

Source: U.S. Department of Health and Human Services

Figure 23: Baby Was Born More Than Three Weeks Before Due



Source: South Dakota Department of Health

Table 30: Number of Routine Well Baby Check-Ups

0	1.0%
1	4.6%
2	25.0%
3	30.3%
4	24.4%
5	13.9%
Not answered	0.9%

Source: South Dakota Department of Health

Well Baby Check-Ups

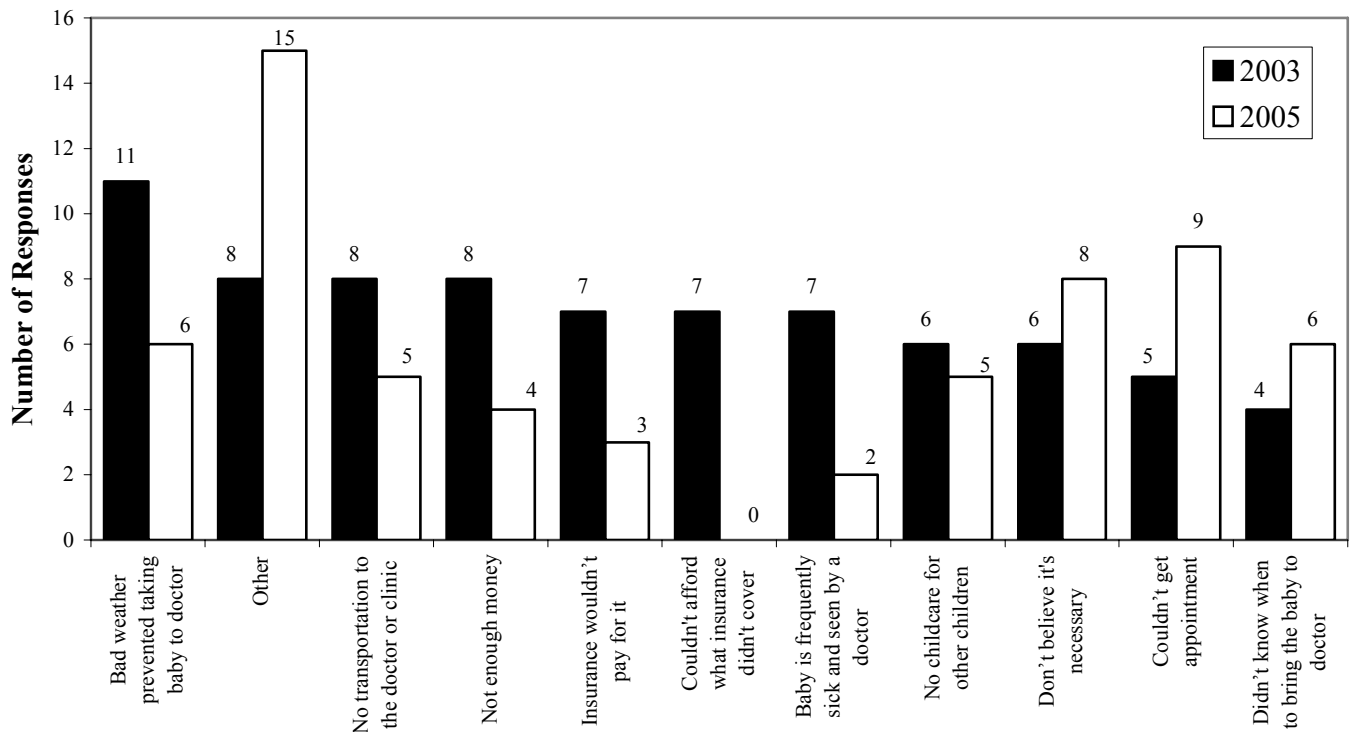
Only 1 percent of babies had not been to the doctor for a routine well baby check-up and 5.1 percent reported reasons for not taking their baby for a well baby check-up. The most common “other” reason for not taking their baby for routine baby care was that they didn’t want to expose the baby to the flu or RSV (Respiratory Syncytial Virus). In 2003, bad weather kept the most respondents from taking their baby for well baby care.

Table 31: Did Anything Keep You From Taking Your Baby for Routine Well Baby Care?

Yes	5.1%
No	94.6%
Not answered	0.3%

Source: South Dakota Department of Health

Figure 24: Reasons Baby Has Not Been to Doctor for a Routine Check-Up, 2003-2005



Source: South Dakota Department of Health

Table 32: Did Anything Keep You From Getting Medical Care for Your Baby When He or She Was Sick?

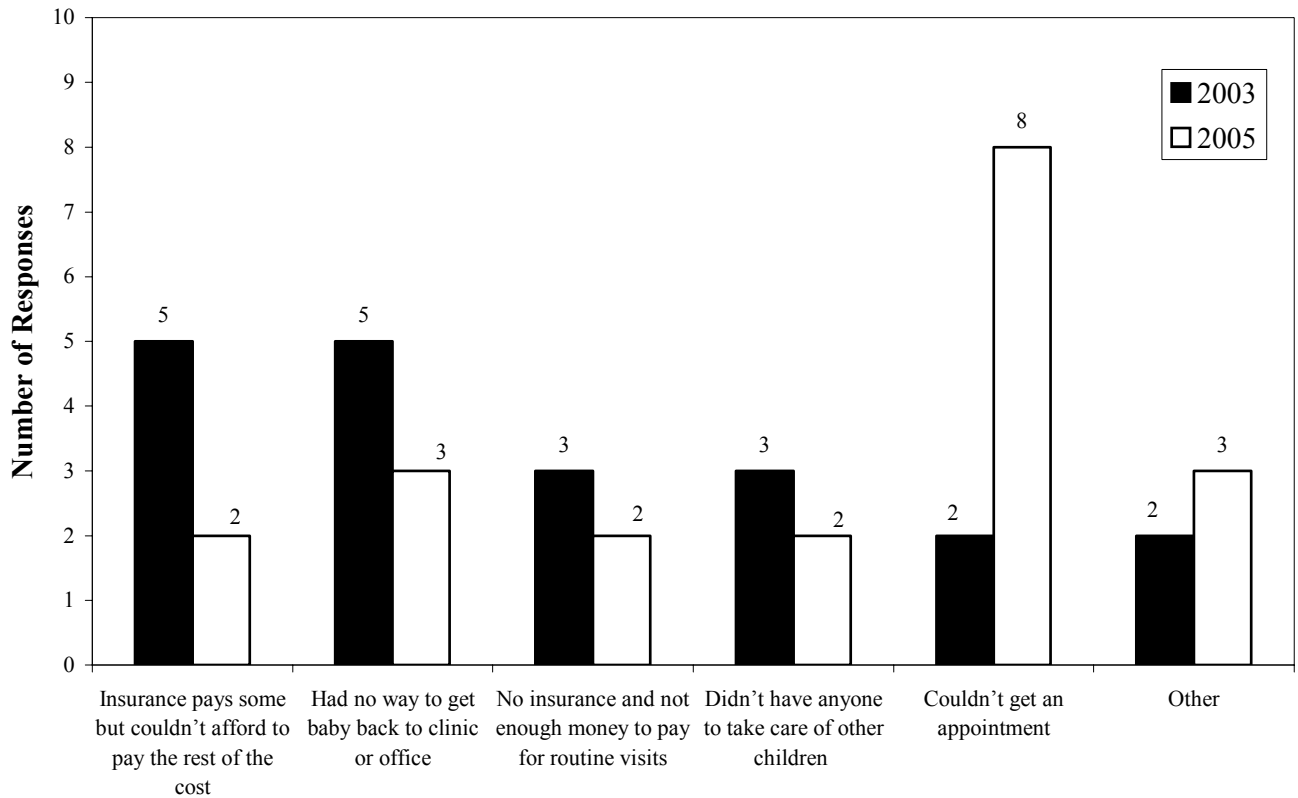
<i>Yes</i>	1.5%
<i>No</i>	77.8%
<i>Baby was not sick</i>	20.0%
<i>Not answered</i>	0.7%

Source: South Dakota Department of Health

Of those babies who did require care, 77.8 percent of mothers said that nothing stopped them from getting medical care when their baby was sick. Only 1.5 percent

of the respondents reported not getting medical care for their baby when he or she was sick and 20 percent of the babies had not been sick.

Figure 25: Reasons Baby Did Not Get Medical Care When Sick, 2003-2005



Source: South Dakota Department of Health

Table 33: Newborn Hearing Screenings

<i>Before leaving hospital.....</i>	<i>84.2%</i>
<i>Don't know</i>	<i>6.1%</i>
<i>Within one month of birth.....</i>	<i>5.7%</i>
<i>Never screened</i>	<i>3.0%</i>
<i>After one month of age</i>	<i>0.6%</i>
<i>Not answered.....</i>	<i>0.4%</i>

Source: South Dakota Department of Health

Newborn Hearing Screening

Good hearing in children is essential to development. All too often, identification of a child's hearing impairment is delayed. If undetected and untreated, hearing loss can lead to delayed speech and language development, social and emotional problems and academic failure. Routine medical care

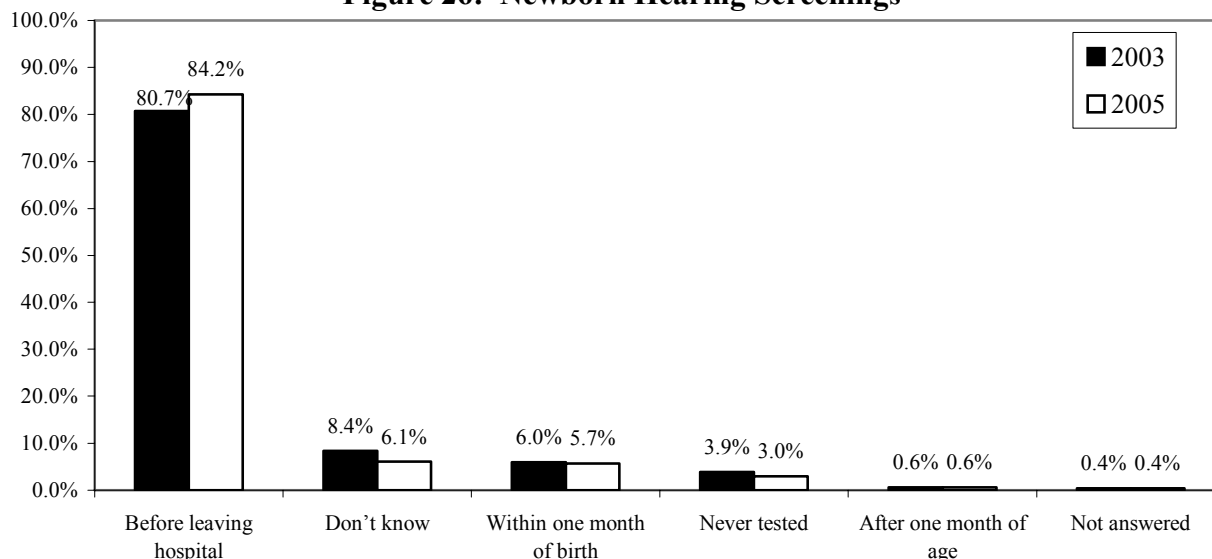
Source: South Dakota Department of Health

should include the hearing evaluation that could identify those children with hearing loss. By detecting hearing loss during the first three months of life, families can be informed of their child's hearing status and appropriate intervention can be initiated immediately.

Of the mothers surveyed, 84.2 percent responded that their new baby's hearing was screened before being discharged from the hospital. Another 6.3 percent had their babies hearing screened at some point after discharge.

Of the survey participants, 84.6 percent said a doctor, nurse, or health care professional had discussed a hearing screening with them.

Figure 26: Newborn Hearing Screenings



Source: South Dakota Department of Health

Department of Health Activities

► In December 1999, the Department of Health implemented the voluntary Newborn Hearing Screening Program in cooperation with South Dakota hospitals, clinics, and audiologists. Upon diagnosis of a hearing loss the infant and parents are referred to the Early Intervention Program for Infants and Toddlers with Disabilities within the Department of Education Office of Special Education. This program is called "Birth to Three Connections".

► For further information contact Terry Disburg, South Dakota Department of Health Newborn Hearing Screening Coordinator, (605) 773-3737.

Table 34: Age When Baby Came Home From The Hospital

<i>Less than 12 hours old.....</i>	<i>0.7%</i>
<i>12-24 hours old</i>	<i>16.1%</i>
<i>25-48 hours old</i>	<i>51.1%</i>
<i>More than 48 hours old.....</i>	<i>31.6%</i>
<i>Still in the hospital.....</i>	<i>0.1%</i>
<i>Baby was adopted.....</i>	<i>0.3%</i>
<i>Baby was born at home</i>	<i>0.0%</i>
<i>Not answered.....</i>	<i>0.1%</i>

Source: South Dakota Department of Health

Table 35: Were You Visited at Home?

<i>No</i>	<i>89.2%</i>
<i>Yes.....</i>	<i>10.4%</i>
<i>Not answered.....</i>	<i>0.4%</i>

Age of Baby at Time of First Home Visit

<i>Less than 1 week old</i>	<i>25.8%</i>
<i>Between 1 and 2 weeks old.....</i>	<i>35.1%</i>
<i>More than 2 weeks old</i>	<i>34.0%</i>
<i>Not answered.....</i>	<i>5.1%</i>

Source: South Dakota Department of Health

Discharge Age

A total of 67.9 percent of the babies came home from the hospital in the first 48 hours. Overall, 51.1 percent of the babies came home from the hospital when they were between 25 and 48 hours old, and an additional 16.1 percent came home when they were between 12 and 24 hours old. Another 31.6 percent went home when they were older than 48 hours.

The graph on the next page provides data for surveys conducted in 2001, 2003, and 2005.

Home Visits

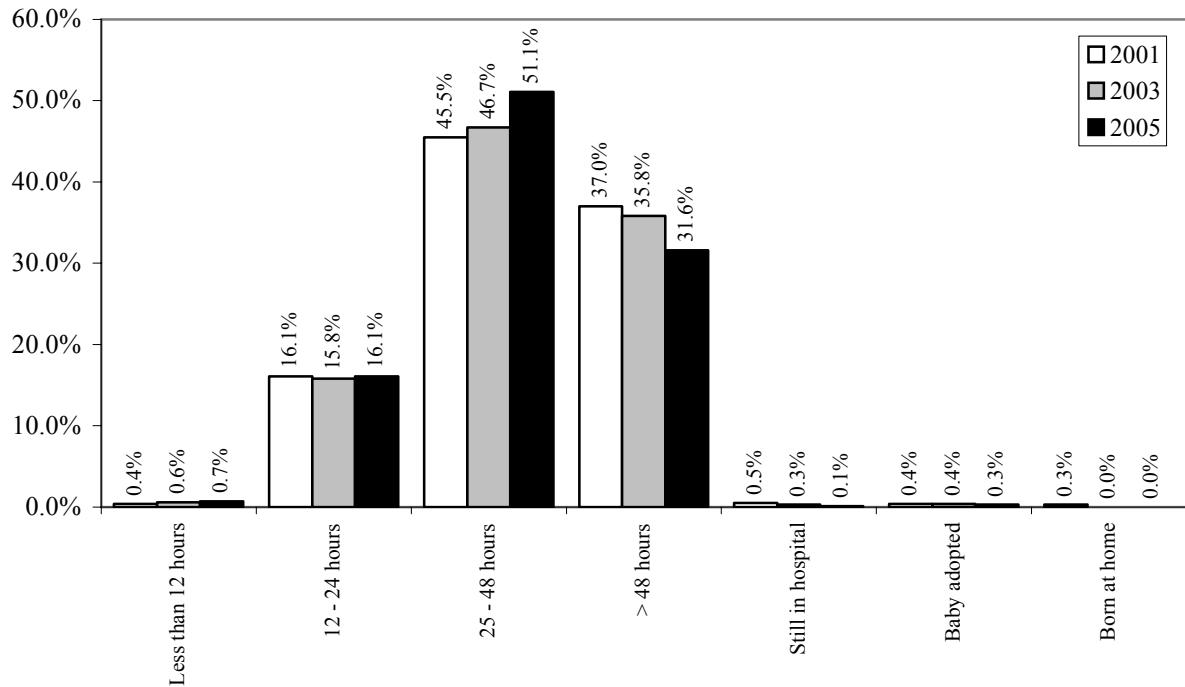
After arriving home, 10.4 percent of the babies were visited by a health care professional. However, the majority of babies (89.2 percent of the total survey population) received no home visit. Of the survey respondents who received a home visit, over half of the babies were less than 2 weeks old.

Department of Health Activities

► Through the Department of Health Baby Care and Bright Start Home Visitation programs, home visits are provided to program participants after their baby is born. Home visits are also provided upon referral by the new mother's medical provider.

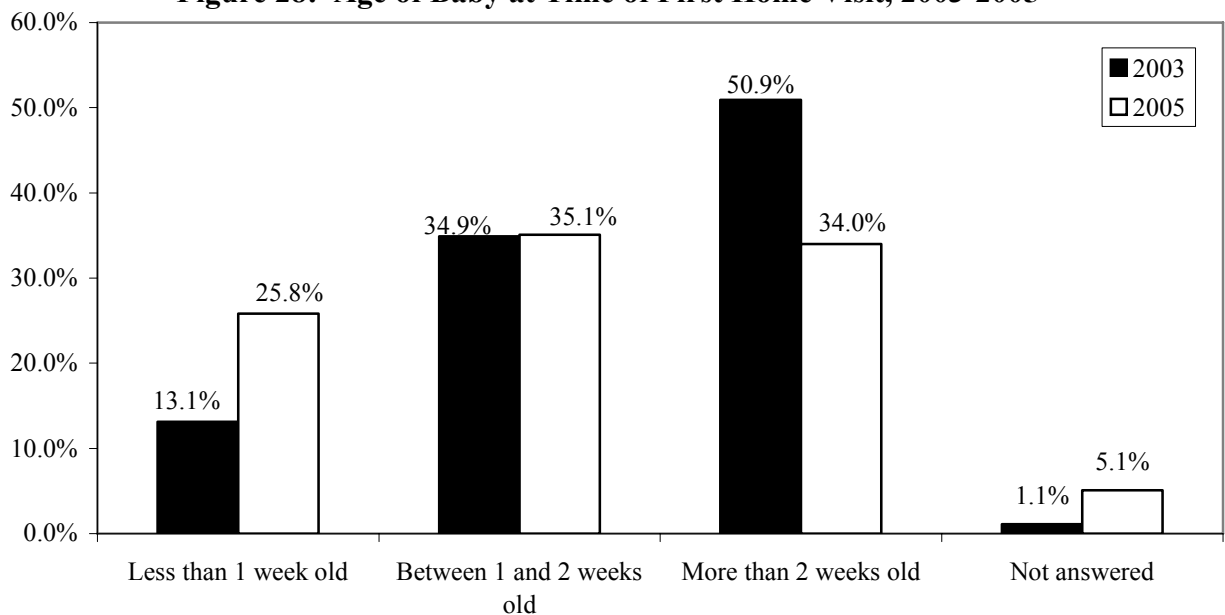
► For further information contact Nancy Shoup, Perinatal Nurse Consultant, (605) 773-3737.

Figure 27: Age When Baby Came Home From The Hospital



Source: South Dakota Department of Health

Figure 28: Age of Baby at Time of First Home Visit, 2003-2005



Source: South Dakota Department of Health

Table 36: Most Useful Sources of Baby Care Information

<i>Experience with</i>	
<i>my other children.....</i>	<i>55.8%</i>
<i>Talking with baby's doctor.....</i>	<i>48.7%</i>
<i>Family and friends</i>	<i>43.8%</i>
<i>Study of books, videos, etc.....</i>	<i>43.8%</i>
<i>Hospital staff.....</i>	<i>27.6%</i>
<i>Packet of information from</i>	
<i>doctor's office.....</i>	<i>16.5%</i>
<i>Classes (prenatal,</i>	
<i>breastfeeding, parenting).....</i>	<i>14.7%</i>
<i>My education/profession</i>	<i>11.3%</i>
<i>Internet</i>	<i>10.9%</i>
<i>Clinic nurse</i>	<i>9.9%</i>
<i>WIC staff.....</i>	<i>7.7%</i>
<i>Public Health, Community</i>	
<i>Health or Baby Care Nurse</i>	<i>4.2%</i>
<i>Other</i>	<i>3.1%</i>
<i>Healthy Start staff.....</i>	<i>0.7%</i>
<i>Bright Start home visits</i>	<i>0.5%</i>
<i>Not answered.....</i>	<i>0.3%</i>

Sources of Baby Care Information

Table 37: Baby Care Information Received

<i>Baby's sleeping position.....</i>	<i>91.8%</i>
<i>Using a car safety seat.....</i>	<i>91.0%</i>
<i>Immunizations/baby shots.....</i>	<i>90.0%</i>
<i>Breastfeeding</i>	<i>88.2%</i>
<i>Birth control.....</i>	<i>87.0%</i>
<i>Shaking the baby.....</i>	<i>76.3%</i>
<i>What baby should eat.....</i>	<i>71.0%</i>
<i>Smoking around the baby</i>	<i>70.7%</i>
<i>Parenting classes.....</i>	<i>70.4%</i>
<i>Other safety tips.....</i>	<i>67.7%</i>

Source: South Dakota Department of Health

Department of Health Activities

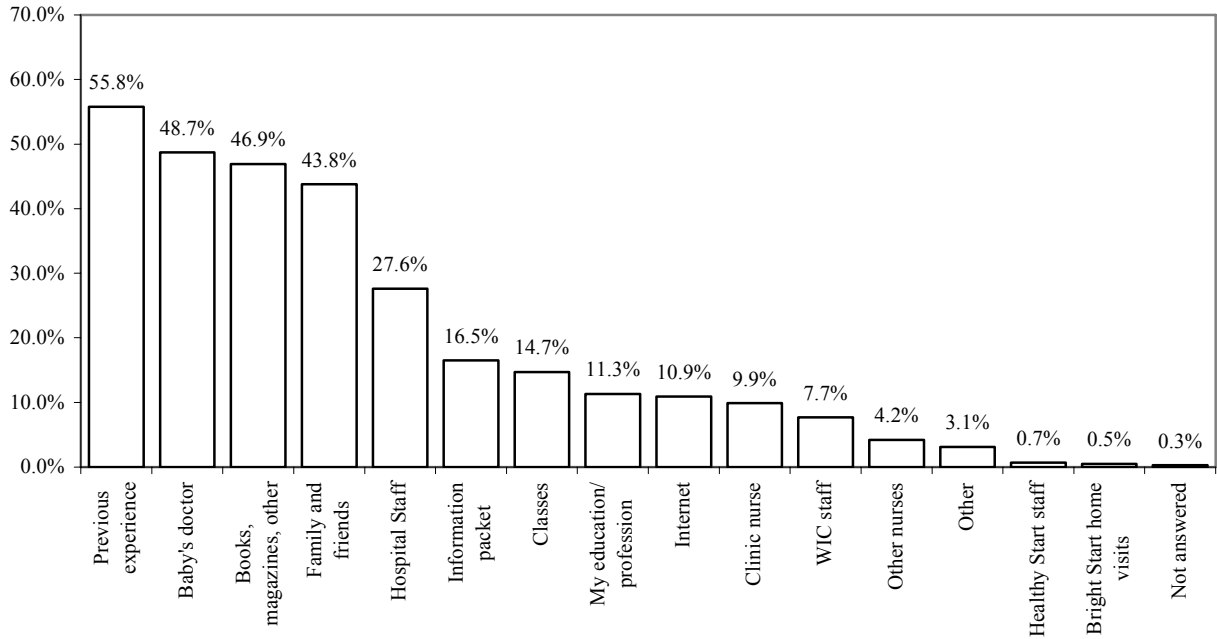
► Through the Department of Health programs such as WIC, Baby Care, Bright Start Home Visitations, and Immunizations information is provided to program participants regarding infant care. The programs develop and purchase client education materials distributed to staff and community partners through the department's Resource Center.

Each survey respondent was asked to identify the three best sources of information for learning to care for the infant.

Experience with other children, talking with the baby's doctor, family and friends, and a study of books, pamphlets and videos were the most common responses.

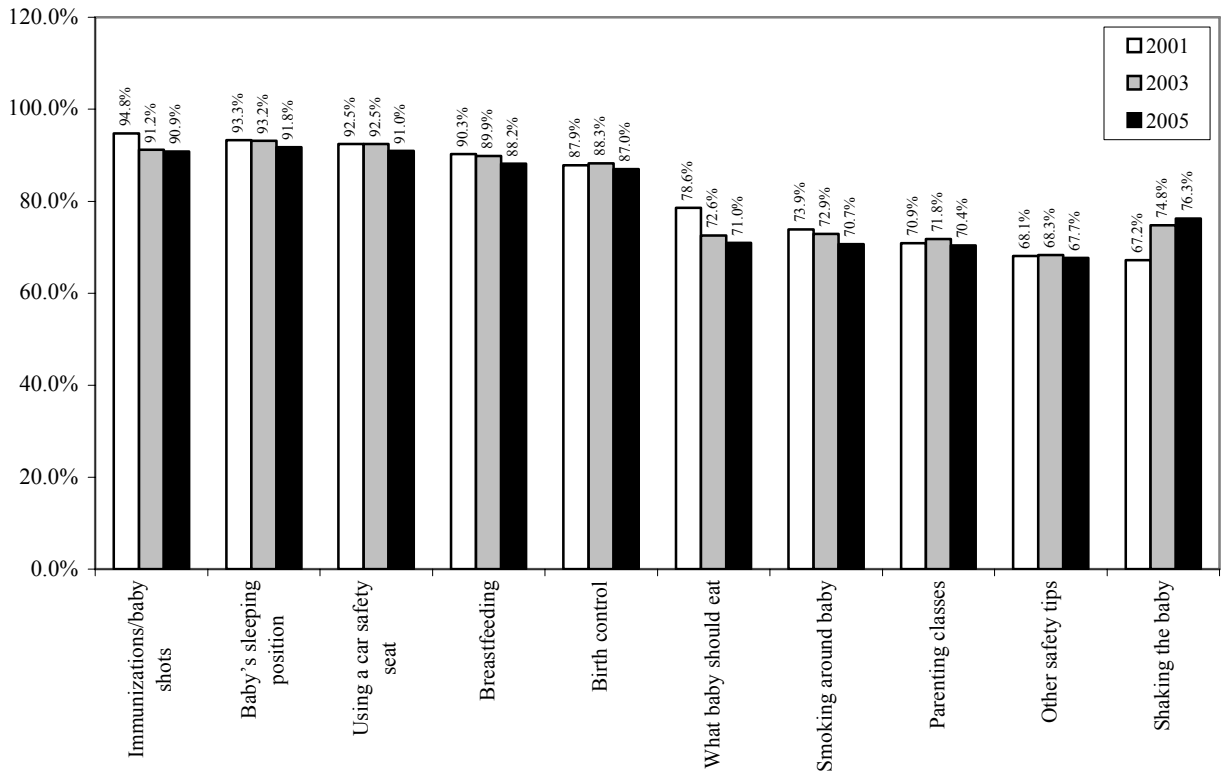
The subjects of baby's sleeping position, using a car safety seat, and immunizations were all discussed with over 90.0 percent of the respondents.

Figure 29: Most Useful Sources of Baby Care Information



Source: South Dakota Department of Health

Figure 30: Baby Care Information Received From Health Care Professionals



Source: South Dakota Department of Health

SIDS Related Behaviors

Babies who sleep on their stomachs have a higher risk of SIDS. Of the total survey respondents, 91.8 percent reported that a doctor had talked to them about laying the baby down to sleep on his/her back or side, not on the stomach.

Regarding sleeping position, 70.6 percent of the respondents said that they chose the position their baby sleeps because of the recommendation of a health care professional. When the survey questions about sleeping position and why that position was chosen were analyzed, the data indicate that of the babies who sleep on their stomachs, 6.5 percent of mothers chose that sleeping position because it was recommended by a

Sudden infant death syndrome or SIDS is the sudden death of an infant under one year of age which remains unsolved after a thorough case investigation.

Table 38: Sleeping Positions of The Baby

Back	80.8%
Side	9.0%
Stomach	9.8%
Not answered	0.4%

Source: South Dakota Department of Health

doctor or nurse. Of the babies that were placed on their backs, 84.3 percent of the mothers chose the position as the result of a recommendation by a doctor or nurse.

Other common reasons women chose the position their baby slept in included:

- Reading about it in a magazine, newspaper or baby care book (52.8 percent of the total survey population),
- Choosing same position in which other children had slept (28.3 percent of the total survey population).
- Heard about it on TV or radio (17.1 percent of the total survey population).

According to the 2004 Vital Statistics Report, 0.7 deaths per 1,000 live births were attributed to Sudden Infant Death Syndrome, which is half as many as in 2003. The total rate of infant deaths in 2004 was 8.2 deaths per 1,000 live births, an increase from 2003's 6.6 deaths per 1,000 live births.

The number of babies sleeping on their stomachs has increased from 7 percent in 2003 to 9.8 percent in 2005. Of the responses given for this position, 73.9 percent stated that this was the only way the baby would sleep or slept best and 2.2 percent stated it was because of sleep apnea.

Healthy People 2010

Objective 16-1h is to reduce deaths from Sudden Infant Death Syndrome (SIDS) to 0.25 deaths per 1,000 live births.

Source: U.S. Department of Health and Human Services

Department of Health Activities

► The Department of Health promotes the Back To Sleep campaign.

► For further information contact Nancy Shoup, Perinatal Nurse Consultant, (605) 773-3737.

Figure 31: Sleeping Positions of The Baby

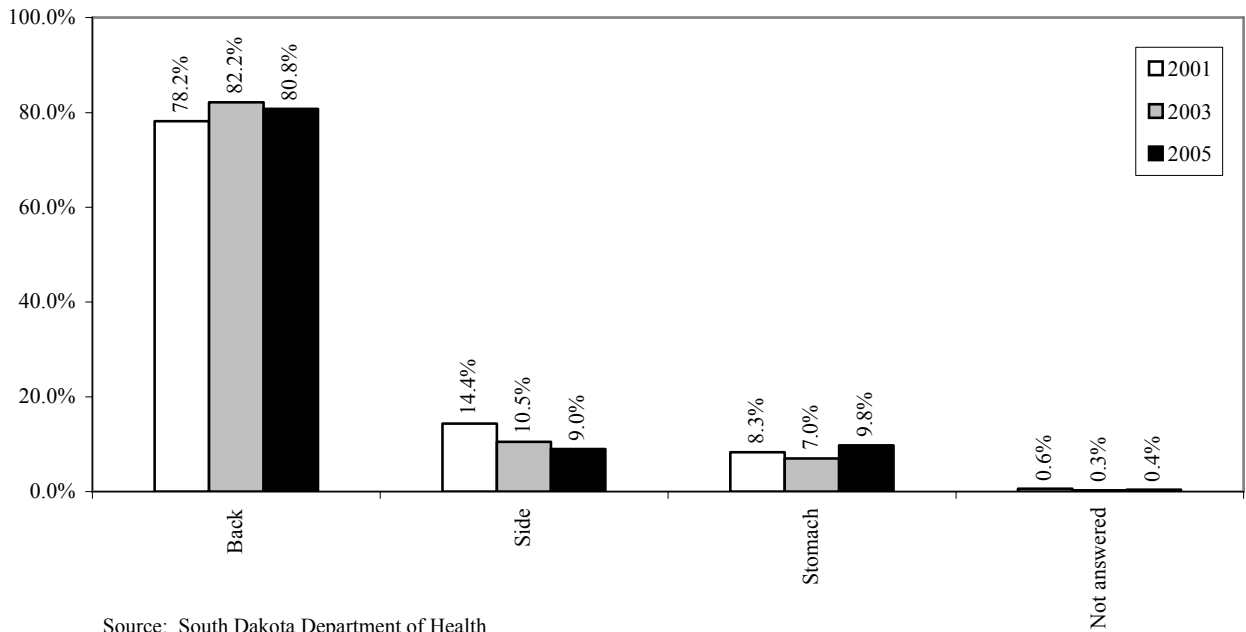


Figure 32: Why Back Was Chosen as Baby's Sleeping Position

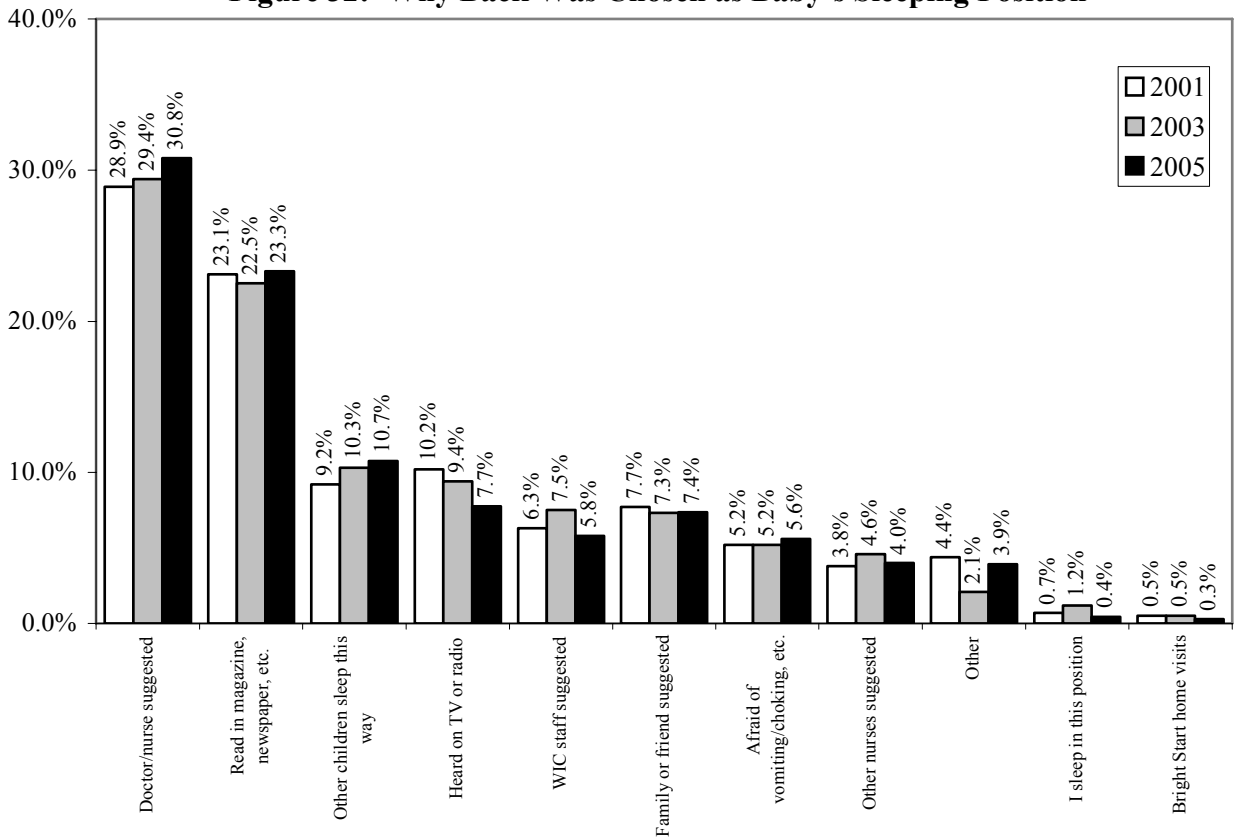
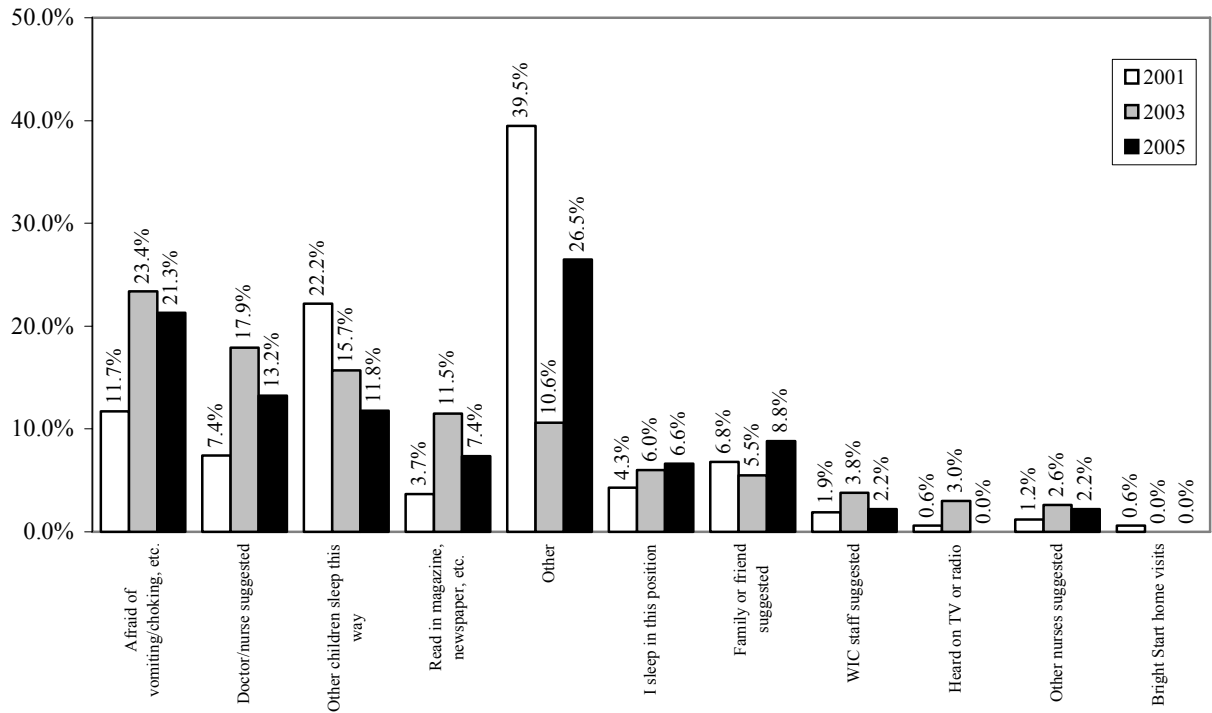
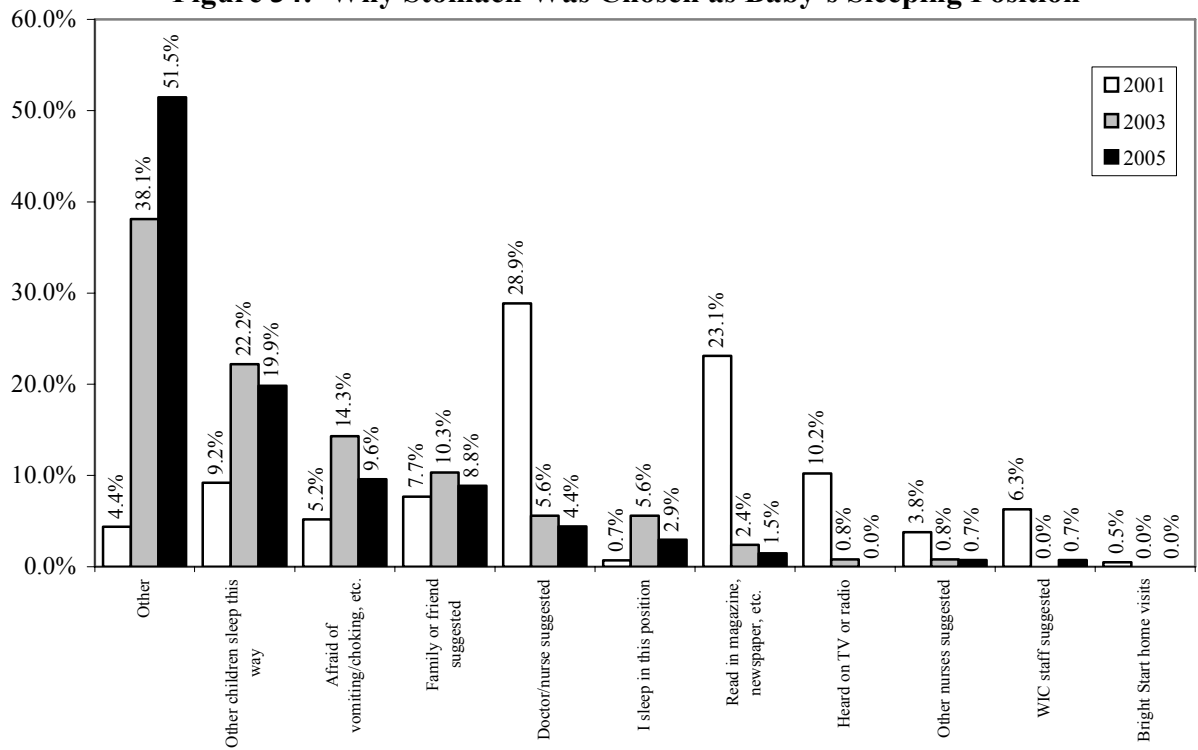


Figure 33: Why Side Was Chosen as Baby's Sleeping Position



Source: South Dakota Department of Health

Figure 34: Why Stomach Was Chosen as Baby's Sleeping Position



Source: South Dakota Department of Health

Bedding Supplies and SIDS

Having the baby sleep on a firm, tight-fitting mattress in a crib that meets current safety standards can also reduce the risk of SIDS.

Of the 936 survey respondents, 70 percent responded that their baby sleeps in a standard size crib while 11.3 percent reported their baby sleeps in a bassinet or cradle.

Pillows, quilts, comforters, sheepskins, stuffed toys and other soft products should be removed from the crib. A sleeper or other sleep clothing should be considered as an alternative to blankets, with no other covering. A baby should not be placed on a waterbed, sofa, soft mattress, pillow, or other soft surface to sleep.

When asked what type of material is under the sleeping baby, 37.1 percent responded their baby sleeps on a combination of a firm mattress, mattress pad and sheet. Another 27.9 percent responded that their baby sleeps on a firm mattress with a sheet.

Table 39: Where Baby Sleeps

<i>Crib, standard size</i>	70.0%
<i>Bassinet, cradle</i>	11.3%
<i>Adult bed</i>	9.87%
<i>Portable crib</i>	2.7%
<i>Infant or car safety seat</i>	2.5%
<i>Playpen</i>	1.9%
<i>Other</i>	1.5%
<i>Not answered</i>	0.3%

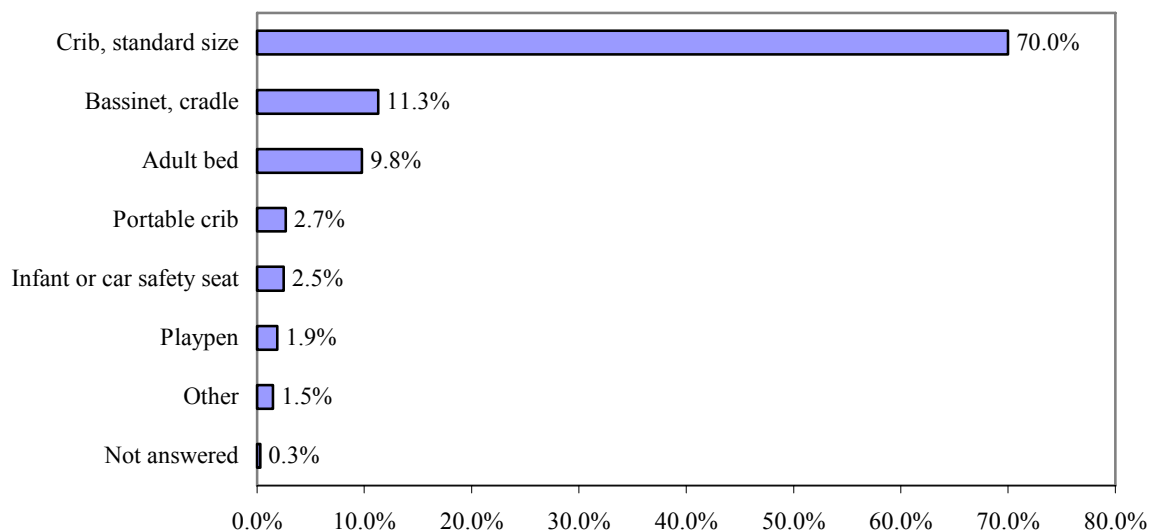
Source: South Dakota Department of Health

Table 40: Materials Under Sleeping Baby

<i>Mattress, firm</i>	84.7%
<i>Sheet</i>	72.3%
<i>Mattress pad</i>	43.6%
<i>Blankets</i>	17.2%
<i>Foam pad</i>	6.0%
<i>Pillow</i>	3.7%
<i>Other</i>	0.4%
<i>Cushion</i>	0.3%
<i>Featherbed</i>	0.3%
<i>Sheepskin</i>	0.2%
<i>Water bed</i>	0.2%
<i>Rug</i>	0.0%
<i>Beanbag</i>	0.0%

Source: South Dakota Department of Health

Figure 35: Where Baby Sleeps



Source: South Dakota Department of Health

Breastfeeding

Overall, 78.5 percent of the surveyed mothers were breastfeeding their baby at the time of hospital discharge.

The percentage of mothers who were breastfeeding at the time of discharge increased with the mother's age. Also, mothers that intended the pregnancy had a higher percentage of breastfeeding compared to those that did not intend the pregnancy.

Overall, 88.2 percent received information about breastfeeding their infant. Of those who received information 80.5 percent breastfed at discharge, compared to 7.4 percent who breastfed and reported not receiving information on breastfeeding. A breastfeeding class was attended by 18.5 percent of the mothers surveyed.

Breast milk:

- Contains more beneficial ingredients than infant formula.
- Is more easily digested than infant formula, resulting in fewer cases of constipation, or colic, and stress on the infant's kidneys.
- Contains antibodies and other anti-infective properties which contribute to fewer cases of diarrhea, respiratory infections and other medical problems in breastfed infants.
- Costs less than purchasing formula.
- Reduces childhood obesity.

- Is nonallergenic. Babies are never truly allergic to breastmilk. In families with a history of allergies, breastmilk is the best way to avoid serious allergies.

Breastfeeding at time of discharge has increased from 70.1 percent in 2001 to 78.6 percent in 2005. Also the percent of mother's reporting breastfeeding at least once a day for the first month has increased from 63.1 percent in 2001 to 73 percent in 2005. This was a decrease from 2003 when 79 percent breastfed once a day for the first month.

Table 41: Baby Breastfed at Hospital Discharge

Yes.....	78.6%
No	21.1%
Not answered	0.4%

Baby Breastfed Once a Day for First Month

Yes.....	73.0%
No	26.6%
Not answered	0.4%

Source: South Dakota Department of Health

Table 42: Breastfeeding Class Attendance

No.....	79.5%
Yes.....	18.5%
Not answered	2.0%

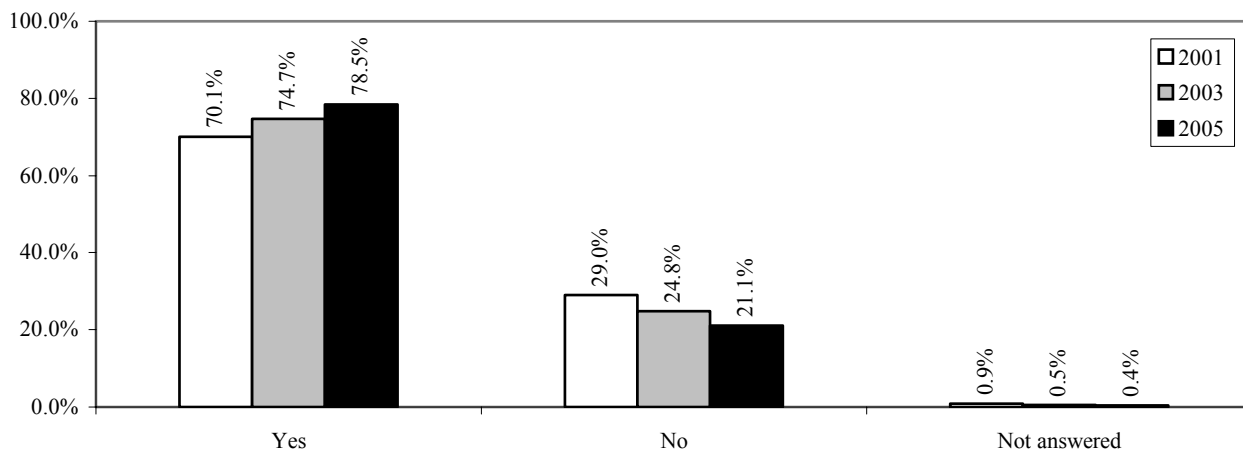
Source: South Dakota Department of Health

Healthy People 2010

Objective 16-19a is to increase percent of mothers who breastfeed in early postpartum period to 75%.

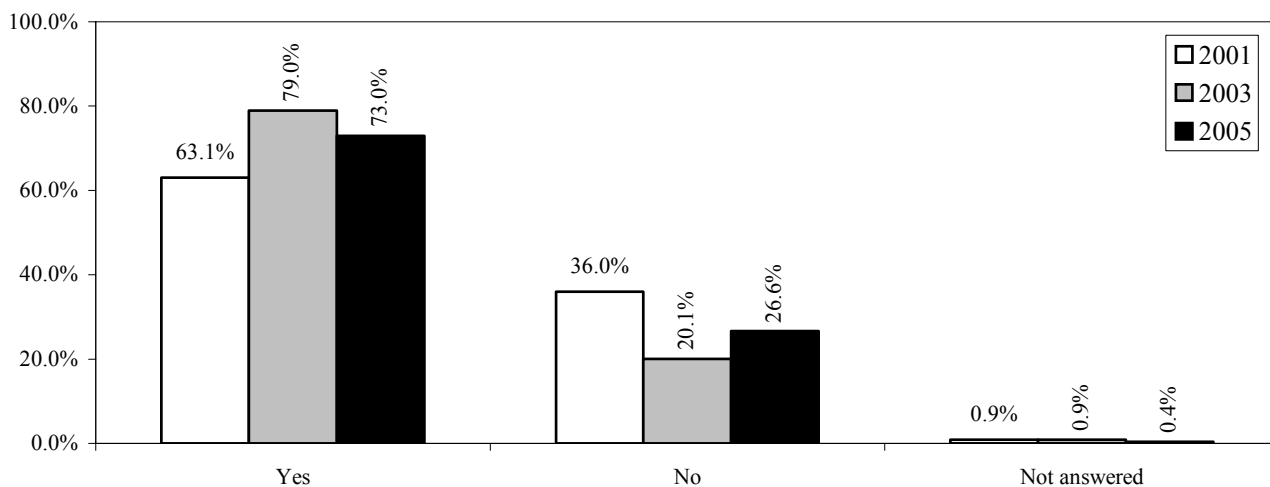
Source: U.S. Department of Health and Human Services

Figure 36: Baby Breastfed at Hospital Discharge



Source: South Dakota Department of Health

Figure 37: Baby Breastfed Once a Day for First Month



Source: South Dakota Department of Health

Department of Health Activities

► The Department of Health promotes breastfeeding as the preferred method of infant feeding in all of its programs. Women participating in the WIC, Baby Care and Bright Start Home Visitation programs are counseled about the benefits of breastfeeding and are assisted to initiate and sustain breastfeeding. The Department of Health WIC program provides manual breastpumps and loans electric breastpumps to WIC participants to assist them with breastfeeding.

► The Department of Health is an active member of the South Dakota Breastfeeding Coalition and collaborates with the Coalition to promote World Breastfeeding Week each year. Breastfeeding initiation rates for the state are collected via the Newborn Screening Program from each hospital. Letters are sent to hospitals in the state with their individual rates and materials on how to increase and support breastfeeding.

► For further information contact Kristin Biskeborn, State Nutritionist, (605) 734-4551 or Melissa Berg, Nutrition Consultant, (605) 367-7496.

Table 43: Factors Preventing Mothers From Breastfeeding

<i>Planning to go to work or school</i>	16.0%
<i>Other</i>	14.4%
<i>Didn't think there was enough milk</i>	13.9%
<i>Didn't want to breastfeed</i>	13.4%
<i>Baby didn't breastfeed well</i>	12.1%
<i>Baby preferred the bottle</i>	6.0%
<i>Embarrassed in front of others</i>	4.8%
<i>Felt it was time to stop</i>	4.0%
<i>Taking medication</i>	3.5%
<i>No one to help with problems</i>	2.4%
<i>Baby was premature or adopted</i>	1.9%
<i>Believe bottle-feeding is better</i>	1.5%
<i>Partner/family didn't want breastfeeding</i>	1.3%
<i>Breast surgery prevented me</i>	1.2%

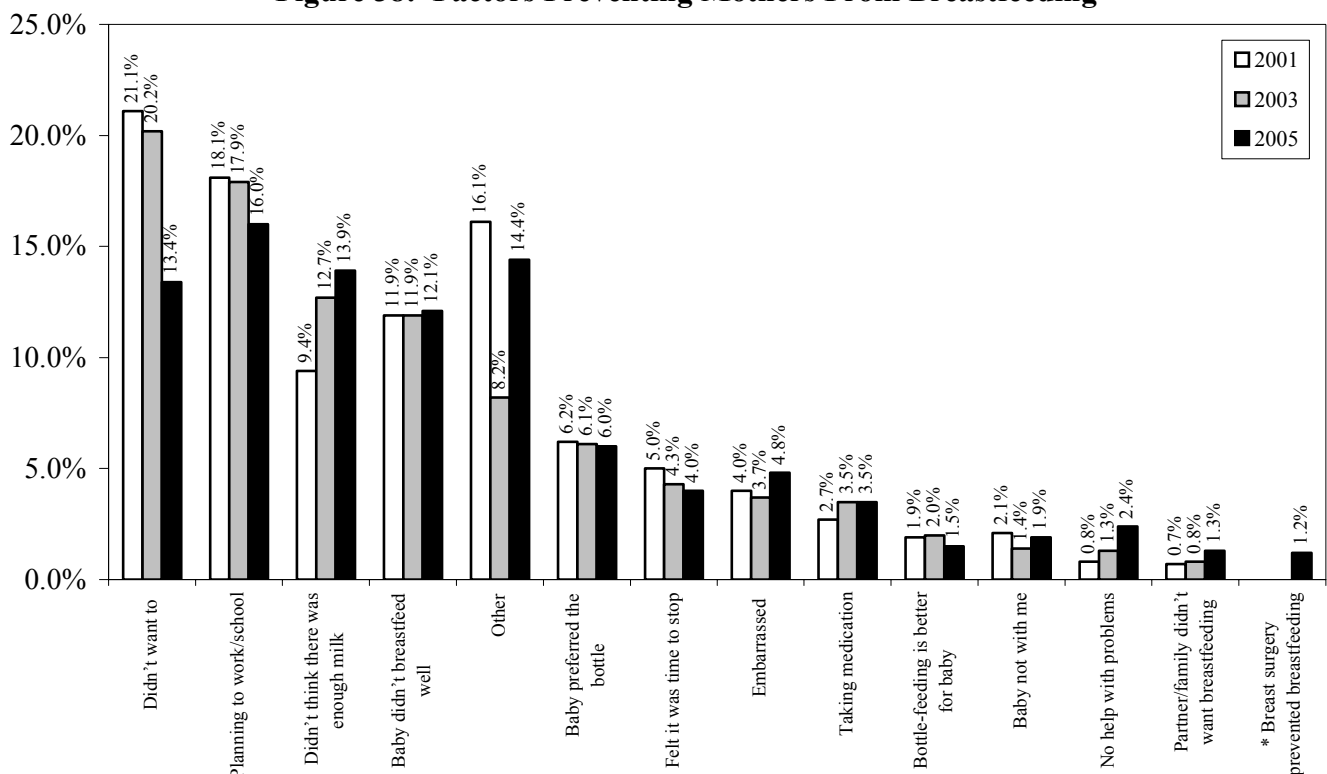
Source: South Dakota Department of Health

Barriers to Breastfeeding

The most common reasons that women did not breastfeed were because they planned to go back to work or school or they didn't think there was enough milk.

Among other reasons women gave for not breastfeeding were that it was too painful, they did not have enough time, other children made it difficult and problems with the milk supply. Breast surgery as a barrier to breastfeeding was a new response option in 2005 and 1.2 percent indicated that breast surgery prevented them from breastfeeding.

Figure 38: Factors Preventing Mothers From Breastfeeding



* New response option in 2005

Source: South Dakota Department of Health

Shaken Baby Syndrome and Infant Safety

Shaking a baby or child can cause blindness, brain damage or death. Young infants have weak neck muscles and cannot support their heavy heads. If they are shaken, their heads move back and forth. Since the blood vessels connecting the brain and skull are weak and underdeveloped, this may cause brain damage and bleeding in or on the surface of the brain. This injury is known as “Shaken Baby Syndrome.”

Of the survey respondents, 76.3 percent said that a doctor or nurse talked to them about the effects of shaking a baby.

Overall, 67.7 percent of the mothers responding to the survey said that a doctor, nurse, or other health care professional had talked with them about other safety issues. This included safety tips about objects such as cribs, baby walkers and playpens.

Preventing Shaken Baby Syndrome:

- ✓ *Never shake a baby!*
- ✓ *Tossing the baby in the air or bouncing on the knee has the potential to hurt the baby and should be avoided.*
- ✓ *While holding a baby, always support the head.*
- ✓ *Learn how to calm yourself if the baby won't stop crying.*

Be Careful To Avoid Injury In:

- ✓ *Cribs*
- ✓ *Baby walkers*
- ✓ *Playpens*

If a baby in your care won't stop crying, try the following:

- make sure the baby's basic needs are met (for example, he isn't hungry and doesn't need to be changed)
- check for signs of illness, like fever or swollen gums
- rock or walk with the baby
- sing or talk to him
- offer the baby a pacifier or a noisy toy
- take him for a ride in his stroller or in his car seat in the car
- swaddle the baby snugly in a blanket
- turn on the stereo, run the vacuum cleaner or the clothes dryer, or run water in the tub (babies like rhythmic noise)
- hold the baby close against your body and breathe calmly and slowly
- call a friend or relative for support or to take care of the baby while you take a break
- if nothing else works, put the baby on his [back](#) in his crib, close the door, and check on him in 10 minutes

Solid Foods

The American Academy of Pediatrics currently recommends gradually introducing solid foods after 6 months of age. Solids do not help young infants to sleep through the night.

Starting solids too soon can:

- Cause choking
- Be hard for baby to digest
- Cause food allergies
- Prevent baby from getting enough breast milk or formula.

Table 44: When Baby Was First Fed Solid Foods

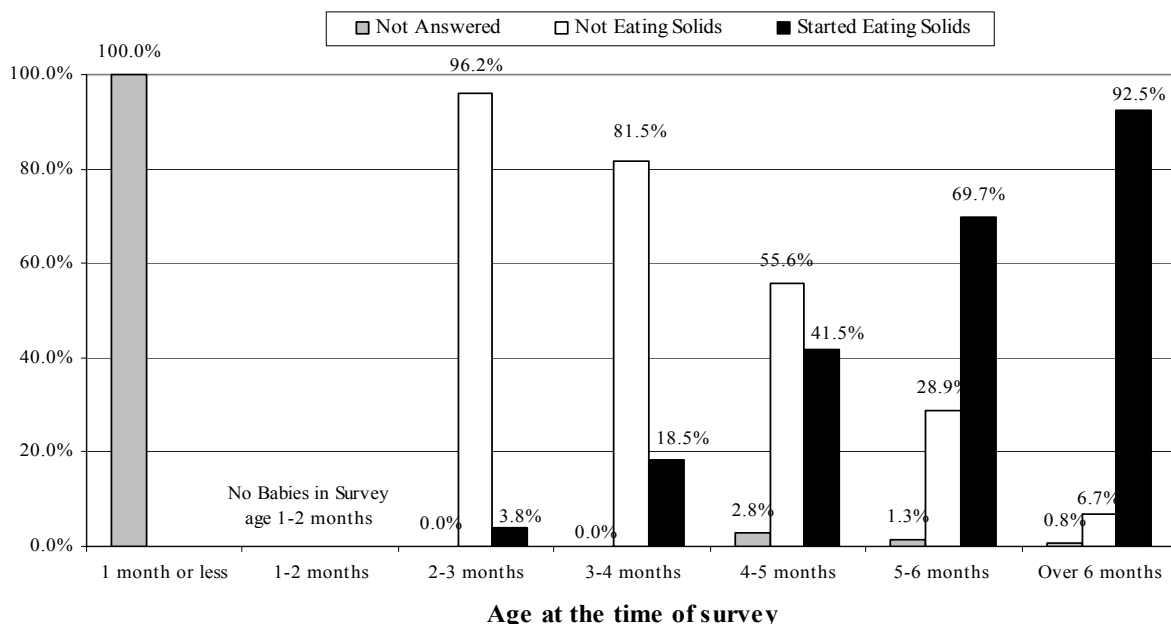
<i>Baby not eating solid foods yet.....</i>	<i>38.7%</i>
<i>4 weeks or less (1 month or less).....</i>	<i>0.3%</i>
<i>5-8 weeks (one to two months)</i>	<i>1.8%</i>
<i>9-12 weeks (two to three months).....</i>	<i>3.1%</i>
<i>12-16 weeks (three to four months)..</i>	<i>10.1%</i>
<i>17-20 weeks (four to five months)</i>	<i>25.9%</i>
<i>21-24 weeks (five to six months).....</i>	<i>13.1%</i>
<i>24 weeks or more</i>	
<i>(six months or older).....</i>	<i>5.9%</i>
<i>Not Answered</i>	<i>1.1%</i>

Source: South Dakota Department of Health

BABIES ARE READY FOR SOLIDS WHEN THEY CAN:

- Hold neck steady
- Sit without support
- Open mouth when food is offered
- Draw in lower lip when spoon is removed from mouth
- Keep food in mouth and swallow it
- Reach for food showing they want some

Figure 39: Age of Infants Eating Solids at The Time of The Survey



Source: South Dakota Department of Health

Table 45: Number of People in Household

1.....	0.1%
2.....	4.2%
3.....	34.0%
4.....	31.9%
5.....	16.9%
6.....	6.4%
7.....	3.4%
8.....	1.4%
9 or more	1.6%

Source: South Dakota Department of Health

Household Information

The most common household sizes were 3 people at 34 percent and 4 people at 31.9 percent.

Of all the households, 32.8 percent had one person 17 years or younger and 33.1 percent had two people 17 years or younger.

Annual Household Income

Overall, 40.7 percent of the survey respondents reported their annual household income before taxes and other deductions to be \$50,000 or more.

Table 46: Number of People 17 Years or Younger in Household

0 or not answered	8.2%
1	32.8%
2	33.1%
3	15.1%
4	6.4%
5 or more.....	4.4%

Source: South Dakota Department of Health

Table 47: Annual Household Income

Under \$10,000.....	6.2%
\$10,000 - \$19,999.....	8.8%
\$20,000-\$29,999.....	10.6%
\$30,000-\$39,999.....	12.8%
\$40,000-\$49,999.....	12.3%
\$50,000 or more	40.7%
Don't know	7.3%
Not answered.....	1.4%

Source: South Dakota Department of Health

Age of Parents

The average age of the total survey participants was 29 years. The most common age for the baby's mother was 27. When age categories are used, the majority of mothers were between 25 and 29 years old.

The average age of the father was 31 years. The most common age of the babies' fathers was 29 years and the most common age group was between 30 and 34 years.

Table 48: Age of Baby's Mother

	Survey	Vital Statistics
< 15.....	0.0%.....	0.1%
15-17.....	0.9%.....	2.6%
18-19.....	2.5%.....	7.3%
20-24.....	19.1%.....	28.2%
25-29.....	36.1%.....	30.4%
30-34.....	27.8%.....	21.2%
35-39.....	11.1%.....	8.5%
40-44.....	2.4%.....	1.7%
45 plus.....	0.2%.....	0.1%
Not Answered.....	0.0%.....	0.0%

Source: South Dakota Department of Health

Table 49: Age of Baby's Father

	Survey	Vital Statistics
15-17.....	0.1%.....	0.6%
18-19.....	1.5%.....	2.8%
20-24.....	12.0%.....	17.8%
25-29.....	28.5%.....	26.4%
30-34.....	30.2%.....	23.2%
35-39.....	17.4%.....	11.9%
40-44.....	7.5%.....	5.0%
45 plus.....	2.2%.....	1.8%
Not Answered.....	0.5%.....	10.6%

Source: South Dakota Department of Health

Education of Parents

When asked for their highest level of education completed, 37.8 percent of mothers had completed college and 28.6 percent had some college or technical school. An additional 14.1 percent of the mothers had completed high school.

The majority or 30.9 percent of the fathers had completed college. The same percentage (28.6 percent) of the fathers, as the mothers, had some college or technical school. While, 20.1 percent of the babies' fathers had completed high school.

The tables below provide a comparison of the highest level of education completed between the survey participants and vital statistics data collected from the 2004 birth certificates.

Table 50: Education of Mother

	Survey	Vital Statistics
No Formal Education.....	0.0%	0.0%
Some Grade School.....	0.2%	0.8%
Completed Grade School	3.3%	2.5%
Some High School	3.7%	12.8%
Completed High School or GED.....	14.1%	32.3%
Some College or Tech School	28.6%	19.7%
Completed College	37.8%	21.6%
Some Graduate Work.....	3.7%	NA
Completed Graduate Work	8.3%	10.3%
Not Answered	0.1%	0.1%

Source: South Dakota Department of Health

Table 51: Education of Father

	Survey	Vital Statistics
No Formal Education.....	0.1%	0.0%
Some Grade School.....	0.2%	0.7%
Completed Grade School	2.8%	2.1%
Some High School	5.0%	8.1%
Completed High School or GED.....	20.1%	33.1%
Some College or Tech School	28.6%	16.0%
Completed College	30.9%	17.1%
Some Graduate Work.....	3.5%	NA
Completed Graduate Work	8.1%	9.1%
Not Answered	0.6%	13.8%

Source: South Dakota Department of Health

In order to determine how survey results compared to the general population of the states, certain responses were compared to information from the 2003 South Dakota Vital Statistics Report and from the 2004 birth certificates. The data in this report were compiled and maintained by the South Dakota Department of Health, Office of Data, Statistics and Vital Records.

Table 52: Low Birth Weight*

2004 Vital Statistics.....	6.9%
2003 Vital Statistics.....	6.7%
2002 Vital Statistics.....	7.2%
2001 Vital Statistics.....	6.4%
2000 Vital Statistics.....	6.2%
1999 Vital Statistics.....	5.9%
1998 Vital Statistics.....	5.9%
Survey results	6.1%

Source: South Dakota Department of Health

Survey Results Compared to Vital Statistics Data

Both vital statistics and survey results show that the incidence of low birth weight increased if the mother smoked during pregnancy. However, the percent of mothers who smoked during their pregnancy has been slowly declining. This year 8 percent of survey participants that smoked while pregnant, is half (16.4 percent) of the mothers who indicated they smoked while pregnant in 2003.

Table 53: Mother Smoked During Pregnancy

2004 Vital Statistics	18.7%
2003 Vital Statistics	18.9%
2002 Vital Statistics	18.7%
2001 Vital Statistics	19.5%
2000 Vital Statistics	19.9%
1999 Vital Statistics	21.0%
1998 Vital Statistics	21.0%
Survey results	8.0%

Source: South Dakota Department of Health

The average age of the mothers in the survey was two years older then the average age of mothers from 1998 to 2004 determined by vital statistics data.

* Low birth weight is babies weighing less than 5 pounds, 9 ounces.

Table 54: Average Age of Mother

2004 Vital Statistics.....	27
2003 Vital Statistics.....	27
2002 Vital Statistics.....	27
2001 Vital Statistics.....	27
2000 Vital Statistics.....	27
1999 Vital Statistics.....	27
1998 Vital Statistics.....	27
Survey results	29

Source: South Dakota Department of Health

Glossary

Glossary

Baby Care/Case Management: The Baby Care program is a cooperative effort between the Department of Health's Perinatal Program and the Department of Social Services' Medicaid program to provide case management services for high risk pregnant women. The goal of case management is to reduce maternal, neonatal, and infant mortality and morbidity in South Dakota. The purpose of the program is to assist pregnant women in obtaining needed services such as physician prenatal care, and to provide nursing services to promote a healthy pregnancy and positive birth outcome.

Community Health nurses assist clients in accessing medical care and other appropriate services, promote optimal health during pregnancy, and provide in depth prenatal education to foster positive pregnancy outcomes. The Community Health Nurse assists in coordinating care within the client's community to utilize those resources which are best suited to the client's needs.

Body Mass Index (BMI): Weight in pounds times 703 divided by height in inches squared.

$$\text{BMI} = \frac{\text{Weight (lbs)} \times 703}{\text{Height}^2 \text{ (in)}}$$

Ideal Weight Gain Recommendations (IOM*)	
Prepregnancy Weight Status	Ideal Weight Gain
Very Underweight (BMI < 18.0)	28 – 40 lbs
Underweight (BMI 18.0 – 19.7)	28 – 40 lbs
Normal Weight (BMI 19.8 – 26.0)	25 – 35 lbs
Overweight (BMI 26.1 – 29.0)	15 – 25 lbs
Very Overweight (BMI 29.0)	15 lbs at least

* Institute of Medicine

FAS / FAE: Fetal Alcohol Syndrome (FAS) is the name given to a characteristic pattern of severe birth defects caused by maternal alcohol consumption. For a diagnosis of FAS, at least one feature from each of three categories must be present:

1. Prenatal and postnatal growth retardation with abnormally small-for-age weight, length and/or head circumference.
2. Central nervous system disorders with signs of abnormal brain functioning, delays in behavioral development, and /or intellectual impairment.
3. At least two of the following abnormal cranio-facial features: small head, small eyes or short eye openings, poorly developed philtrum (the groove above the upper lip), a thin upper lip, a short nose, or a flattened midfacial area.

Prenatally alcohol-exposed babies with birth defects who do not meet all three criteria for an FAS diagnosis may be categorized as having suspected "fetal alcohol effects" (FAE). These adverse consequences of maternal alcohol use usually include growth retardation.

Glossary

Healthy People 2010: A national agenda has been developed to challenge Americans to improve their health by the year 2010. Healthy People 2000: National Health Promotion and Disease Prevention Objectives, released in 1990, identified health improvement goals and objectives to be reached by the year 2000. The Healthy People 2010 initiative continues in this tradition as an instrument to improve health for the first decade of the 21st century.

HIV / AIDS: HIV (human immunodeficiency virus) is the virus that causes AIDS. This virus is passed from one person to another through blood-to-blood and sexual contact. AIDS stands for acquired immunodeficiency syndrome. An HIV-infected person receives a diagnosis of AIDS after developing one of the CDC-defined AIDS indicator illnesses. An HIV-positive person who has not had any serious illnesses also can receive an AIDS diagnosis on the basis of certain blood tests (CD4+ counts).

WIC: WIC is a USDA funded supplemental nutrition program for pregnant, breastfeeding and post-partum mothers, infants and children up to age 5. To qualify, the household income must be at or below 185 percent of the poverty level and there must be a nutritional risk.

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Appendix

A Survey of Mothers in South Dakota

What is today's date? _____

Baby's Date of Birth: _____

Here are two questions about **your recent pregnancy**. Please check the box next to the best answer.

1. Was your baby born more than 3 weeks **before** its due date?

☐ Yes
☐ No

2. Did your baby weigh **less** than 5 pounds, 9 ounces at birth?

☐ Yes
☐ No

Questions 3-7 are about the **three months before you became pregnant** with your new baby:

3. During the **three months before you were pregnant** did you smoke **cigarettes**?

☐ No, I did not smoke.
☐ Yes, if yes **check one** response below:

☐ a. I smoked less than one cigarette a day.
☐ b. I smoked 1-9 cigarettes per day.
☐ c. I smoked 10-19 cigarettes per day.
☐ d. I smoked 20-29 cigarettes per day.
☐ e. I smoked 30-39 cigarettes per day.
☐ f. I smoked 40-49 cigarettes per day.
☐ g. I smoked 50 or more cigarettes per day.

4. On the average, during the **three months before you were pregnant**, how many **days a week** did you drink beer, wine, or liquor? *If you did not drink at all, enter "0" days and skip to question 6.*

_____ Days a Week
_____ Less than 1 day a week

5. On the average, **how many drinks** of beer, wine, or liquor did you have on the days when you had a drink during the **three months before you were pregnant**? (A drink is: one glass of wine, one wine cooler, one can or bottle of beer, one shot of liquor, or one mixed drink).

_____ Drinks a day

6. During the **three months before you were pregnant** did you take a folic acid pill or multi-vitamin with folic acid? (*Check one answer only.*)

☐ Yes
☐ No
☐ Didn't know I should

7. During the **three months before you were pregnant**, how often did you participate in any physical activity or exercise for a total of 30 minutes or more per day? (For example: walking, swimming, cycling, dancing or gardening. Do not count exercise that is done as part of your job.)

☐ Less than 1 day per week ☐ 3 to 4 days per week
☐ 1 to 2 days per week ☐ 5 or more days per week

8. What was your weight before you became pregnant? _____ pounds

9. What is your height? _____ feet _____ inches

10. What was your weight at time of delivery? _____ pounds

11. Pregnancy can be a difficult time for some women. This question is about things that may have happened **during the 12 months before your delivery. This includes the three months before you got pregnant.** For each event listed below, circle Y (Yes) if it happened to you or N (No) if it didn't.

Y	N	a.	A close family member was very sick and had to go into the hospital.
Y	N	b.	I separated or divorced my husband or partner.
Y	N	c.	I moved to a new address.
Y	N	d.	I was homeless.
Y	N	e.	My husband or partner lost his job.
Y	N	f.	I lost my job even though I wanted to go on working.
Y	N	g.	My husband or partner and I argued more than usual.
Y	N	h.	My husband or partner said he did not want me to be pregnant.
Y	N	i.	I had a lot of bills I couldn't pay.
Y	N	j.	I was involved in a physical fight.
Y	N	k.	My husband or partner or I went to jail.
Y	N	l.	Someone very close to me had a bad problem with drinking or drugs.
Y	N	m.	Someone very close to me died.

Here are a few more questions about your recent pregnancy:

12. How did you feel about becoming pregnant?
Check only one answer.

- ☐ a. I wanted to be pregnant sooner
☐ b. I wanted to be pregnant later
☐ c. I wanted to be pregnant then
☐ d. I didn't want to be pregnant then or any time in the future.
☐ e. I was unsure how I felt about being pregnant.
☐ f. Other: _____

13. Thinking back to just before you got pregnant with your new baby, how did the baby's father feel about you becoming pregnant? *Check only one answer.*

- ☐ a. He wanted me to be pregnant sooner.
☐ b. He wanted me to be pregnant later.
☐ c. He wanted me to be pregnant then.
☐ d. He didn't want me to be pregnant then or at any time in the future.
☐ e. It didn't matter to him when I became pregnant.
☐ f. I don't know.

14. When you got pregnant with your new baby, were you or your husband or partner using any kind of birth control? Examples of birth control are: the pill, condoms, diaphragm, foam, rhythm, natural family planning, shots, patches, or ANY other way to keep from getting pregnant.

- ☐ Yes – (Go to Question 16)
☐ No

15. Why were you or your husband or partner not using any birth control? *Check all that apply.*

- ☐ a. I wanted to get pregnant.
☐ b. I didn't think I could get pregnant.
☐ c. I had been having side effects from the birth control I used.
☐ d. I didn't want to use birth control.
☐ e. I didn't think I was going to have sex.
☐ f. My husband or partner didn't want to use birth control.
☐ g. I had problems obtaining birth control.
☐ h. My religious beliefs do not allow it.
☐ i. I couldn't afford birth control.
☐ j. Other – _____

16. How many weeks or months pregnant were you when you had your first visit to a medical provider for prenatal care? (Don't count a visit that was only for a pregnancy test or receipt of prenatal vitamins.)

_____ weeks or _____ months

- ☐ I didn't go for prenatal care

17. Did anything keep you from getting prenatal care as **early** as you wanted in your pregnancy? Prenatal care is health care while you were pregnant.

- ☐ No
☐ Yes, if yes, check all responses below that apply.

- ☐ a. I had no way to get to the clinic or doctor's office.
☐ b. I couldn't get anyone to take me as a patient.
☐ c. My doctor's schedule was full.
☐ d. I didn't know that I was pregnant.
☐ e. I didn't have enough money to pay for my visits.
☐ f. I didn't need to go so early because I'd been pregnant before and felt I knew what it was all about.
☐ g. I didn't think early prenatal care was important.
☐ h. I was waiting to qualify for Medicaid.
☐ i. I was waiting for my insurance to start.
☐ j. My doctor didn't want to see me until after I was 12 weeks pregnant.
☐ k. I didn't want anyone to know I was pregnant.
☐ l. I didn't have insurance.
☐ m. Other: _____

18. Did anything keep you from having as **many** prenatal visits as you wanted?

- ☐ No
☐ Yes, if yes, check all responses below that apply.

- ☐ a. I had no way to get to the clinic or doctor's office.
☐ b. The office hours were inconvenient.
☐ c. I didn't have enough money to pay for visits.
☐ d. I had as many visits as the doctor felt were necessary (I wanted more).
☐ e. My baby was premature.
☐ f. Bad weather prevented me from getting to the clinic or doctor's office.
☐ g. I couldn't get time off from work.
☐ h. Other: _____

19. Did you have any of the following before or during pregnancy?

- ☐ a. Diabetes
- ☐ b. High blood pressure
- ☐ c. PKU
- ☐ d. Epilepsy
- ☐ e. Inflamed gums
- ☐ f. Other: _____
- ☐ g. I did not have any of the above conditions.

20. Before, during or after your pregnancy did a doctor, nurse, or other health professional talk to you about, or provide printed information on:

Circle Y (Yes-at some point) or N (No-Never) for each event.

- | | | | |
|---|---|-----|--|
| Y | N | a. | Smoking |
| Y | N | b. | Chewing tobacco |
| Y | N | c. | Drinking alcohol |
| Y | N | d. | HIV/AIDS |
| Y | N | e. | Aspirin and other over-the-counter medicines |
| Y | N | f. | Marijuana, crack cocaine, methamphetamine or other street drugs |
| Y | N | g. | Not changing cat litter |
| Y | N | h. | Thoroughly cooking meats |
| Y | N | i. | Avoiding paint fumes, other chemicals and radiation |
| Y | N | j. | Wearing seat belts |
| Y | N | k. | Possible family history of birth defects |
| Y | N | l. | Preterm labor signs |
| Y | N | m. | What I should eat |
| Y | N | n. | What my baby should eat |
| Y | N | o. | Breastfeeding my baby |
| Y | N | p. | How smoking around my baby could affect his/her health |
| Y | N | q. | Parenting classes |
| Y | N | r. | How shaking a baby can cause brain damage |
| Y | N | s. | Laying my baby down to sleep on his/her back or side, not on the stomach |
| Y | N | t. | Using a car safety seat for my baby |
| Y | N | u. | Other safety tips (cribs, baby walkers, playpens, etc.) |
| Y | N | v. | Birth control |
| Y | N | w. | The importance of folic acid in food or vitamin pills to prevent birth defects |
| Y | N | x. | Immunizations/baby shots |
| Y | N | y. | How to care for my teeth and gums. |
| Y | N | z. | Eating certain kinds of fish. |
| Y | N | aa. | Importance of physical activity |
| Y | N | bb. | Newborn metabolic screening |
| Y | N | cc. | Newborn screening-Hearing test |

21. How long has it been since you last visited a dentist or a dental clinic?

- ☐ a. Within the past year.
- ☐ b. Within the past 2 years.
- ☐ c. Within the past 5 years.
- ☐ d. 5 or more years ago.
- ☐ e. Never
- ☐ f. Don't Know

22. Did you have any problems with your teeth or gums during your most recent pregnancy?

- ☐ No
- ☐ Yes – If yes, were you able to see a dentist for treatment?
 - ☐ Yes
 - ☐ No

23. How long has it been since you had your teeth “cleaned” by a dentist or dental hygienist?

- ☐ a. Within the past year.
- ☐ b. Within the past 2 years.
- ☐ c. Within the past 5 years.
- ☐ d. 5 or more years ago.
- ☐ e. Never
- ☐ f. Don't Know

24. Did you eat any type of fish during the last two months of your pregnancy?

- ☐ No – Go to question 27
- ☐ Yes – If yes, answer questions 25 and 26.

25. Estimate the number of meals you had of the different types of fish listed, in the last two months of your pregnancy.

- _____ Northern Pike, Walleye, or Bass
- _____ Crappie, Bluegill, Perch, or Channel Catfish
- _____ Bullhead, Carp, or Trout
- _____ Swordfish, King Mackerel, Shark, or Tilefish
- _____ Red Snapper, Marlin, Orange Roughy,
- _____ Saltwater Bass, Lobster, or Tuna
- _____ Pollock, Cod, Herring, Shrimp, Salmon, or Crab
- _____ Other (explain) _____

26. Estimate the amount of fish you ate during one meal. Check **only one** answer.

- ☐ a. 2 oz. (size roughly equivalent to a half (1/2) deck of cards.)
- ☐ b. 4 oz. (size roughly equivalent to 1 deck of cards.)
- ☐ c. 6 oz. (size roughly equivalent to 1 1/2 deck of cards.)
- ☐ d. 8 oz. (size roughly equivalent to 2 decks of cards.)
- ☐ e. 10 oz. (size roughly equivalent to 2 1/2 decks of cards.)
- ☐ f. More than 10 oz.

27. During your pregnancy, were you on any of these programs? *Check all that apply.*

- ☐ a. WIC (Nutrition Program for Women, Infants and Children)
- ☐ b. Baby Care/Case Management
- ☐ c. Healthy Start
- ☐ d. Food Stamps
- ☐ e. Medicaid – full coverage
- ☐ f. Medicaid – pregnancy only program
- ☐ g. Indian Health Service (IHS)
- ☐ h. Temporary Assistance for Needy Families (TANF)
- ☐ i. Bright Start home visits
- ☐ j. Other - Please list: _____
- ☐ k. I was not in any of the programs listed above.

28. Which **three** of these were the most useful in educating you about your pregnancy and how to take care of yourself?

- ☐ a. Prenatal Classes
- ☐ b. My doctor
- ☐ c. Clinic nurse
- ☐ d. Midwife
- ☐ e. Packet of information handed out at the doctor's office or clinic
- ☐ f. New Beginnings Prenatal Newsletter
- ☐ g. Healthy Start Staff
- ☐ h. WIC Staff
- ☐ i. Public Health Nurse/Community Health Nurse/Baby Care Nurse
- ☐ j. Family and friends
- ☐ k. Books, magazines and other information that I found for myself
- ☐ l. Internet
- ☐ m. My previous experiences with pregnancy
- ☐ n. Other: _____

29. How was your prenatal care paid for? *Check all that apply.*

- ☐ a. Personal income (cash, check or credit card)
- ☐ b. Insurance
- ☐ c. Medicaid – full coverage
- ☐ d. Medicaid – pregnancy only program
- ☐ e. Indian Health Service
- ☐ f. Military
- ☐ g. I still owe
- ☐ h. Other: _____

30. During the **last three months of your pregnancy**, how often did you participate in any physical activity or exercise for a total of 30 minutes or more per day? (For example: walking, swimming, cycling, dancing or gardening. Do not count exercise that is done as part of your job.)

- ☐ Less than 1 day per week
- ☐ 1 to 2 days per week
- ☐ 3 to 4 days per week
- ☐ 5 or more days per week
- ☐ I was told by a doctor, nurse or other health care worker not to exercise.

31. Which statement describes your tobacco use **during** pregnancy? *Check only one answer.*

- ☐ a. I stopped as soon as I knew I was pregnant.
- ☐ b. I stopped later in my pregnancy.
- ☐ c. I tried to stop, but couldn't.
- ☐ d. I decreased my tobacco use.
- ☐ e. I didn't use tobacco.
- ☐ f. I increased my tobacco use.
- ☐ g. I started using tobacco.

32. If you used tobacco during your pregnancy, did your healthcare provider: (*circle your answer*)

- a. Advise you to quit? Yes or No
- b. Refer you to a telephone quit line or other quit tobacco program? Yes or No

33. Are you smoking now?

- ☐ Yes
- ☐ No

34. Which statement best describes the smoking behaviors of you, your family, friends, and daycare provider or babysitter around the baby? *Check only one answer.*

- ☐ a. No one smokes in the house or car at all.
- ☐ b. No one smokes in the house or car when the baby is there.
- ☐ c. No one smokes in the same room when the baby is there.
- ☐ d. No one smokes in the car when the baby is there.
- ☐ e. Smoking is allowed anytime, anywhere in the house or car.
- ☐ f. Other: _____

35. Secondhand smoke increases a baby's risk of dying from Sudden Infant Death Syndrome (SIDS).

- ☐ True
- ☐ False

36. Which statement described your alcohol use during your pregnancy?

- ☐ a. I stopped as soon as I knew I was pregnant.
- ☐ b. I stopped later in the pregnancy.
- ☐ c. I tried to stop, but couldn't.
- ☐ d. I decreased my alcohol use.
- ☐ e. I never used alcohol.
- ☐ f. I increased my use of alcohol.

37. Did you attend

Prenatal Classes ☐ Yes
☐ No

Breastfeeding Classes ☐ Yes
☐ No

Parenting Classes ☐ Yes
☐ No

38. Which **three** of these were most helpful to you in learning to care for your baby?

- ☐ a. Talking with my child's doctor
- ☐ b. Clinic nurse
- ☐ c. A packet of information handed out at my doctor's office
- ☐ d. Classes (Prenatal, Breastfeeding, Parenting)
- ☐ e. Hospital staff
- ☐ f. WIC staff
- ☐ g. Public Health Nurse/Community Health Nurse/Baby Care Nurse
- ☐ h. Family and friends
- ☐ i. Healthy Start Staff (reservations only)
- ☐ j. My own study of books, pamphlets, videos, etc.
- ☐ k. Internet
- ☐ l. Experience with my other child/children
- ☐ m. My education/profession
- ☐ n. Bright Start home visits
- ☐ o. Other: _____

39. Was your baby's hearing tested?

- ☐ a. Before leaving the hospital.
- ☐ b. Within one month of birth.
- ☐ c. After one month of age.
- ☐ d. Never tested.
- ☐ e. Don't know.

Now we would like to ask you about how things went **after your baby came home** from the hospital.

40. How old was your baby when she/he came home from the hospital? *Check only **one** response.*

- ☐ a. less than 12 hours old
- ☐ b. 12-24 hours old
- ☐ c. 25-48 hours old
- ☐ d. more than 48 hours old
- ☐ e. My baby is still in the hospital (Go to question 55)
- ☐ f. 1. My baby was adopted (Go to question 55)
- ☐ f. My baby was born at home (Go to question 40)

41. Did your baby ride home from the hospital in an infant car safety seat?

- ☐ Yes
- ☐ No

42. Where did you get the car safety seat you are now using for your baby? *Check only **one** answer.*

- ☐ a. Purchased new for this baby
- ☐ b. Received new for this baby as a gift
- ☐ c. Had one from another of my babies
- ☐ d. Purchased used (at a rummage sale or thrift store)
- ☐ e. Received or purchased used from a family member or friend
- ☐ f. Given by hospital when baby was born
- ☐ g. Received from Governor's Child Safety Seat Distribution Program.
- ☐ h. We do not use a car safety seat (*go to question 44*)

43. How did you learn about the proper use of your car seat? *Check all that apply.*

- ☐ a. Video
- ☐ b. Family or friend
- ☐ c. Written instructions
- ☐ d. Health care professional
- ☐ e. No one
- ☐ f. Certified child passenger safety technician.
- ☐ g. Other: _____

44. Were you visited at home by someone from public health, community health, the hospital, Bright Start, or the Healthy Start Program?
- ☐ No
- ☐ Yes, if yes **check one** response below:
- ☐ a. Baby was less than 1 week old
- ☐ b. Baby was more than 1 week old, but less than 2 weeks
- ☐ c. Baby was more than 2 weeks old

45. Did you breastfeed your baby at time of discharge from the hospital?

☐ Yes

☐ No (go to question 47)

46. Are you still breastfeeding your baby at least once a day?

☐ Yes

☐ No, if no, how many weeks or months did you breastfeed?

_____ Weeks OR _____ Months

☐ Less than 1 week

47. Did any of these things stop you from breastfeeding? *Check all that apply.*

- ☐ a. I just didn't want to breastfeed.
- ☐ b. Difficult to schedule breastfeeding around work or school.
- ☐ c. I tried but my baby didn't breastfeed very well.
- ☐ d. I didn't think I had enough milk.
- ☐ e. Breastfeeding was too painful.
- ☐ f. Breast surgery prevented me from breastfeeding.
- ☐ g. Baby preferred the bottle.
- ☐ h. There was no one to help me with my breastfeeding problems.
- ☐ i. My baby was not with me.
- ☐ j. I think it's better for my baby to be bottle fed.
- ☐ k. I was taking medicine.
- ☐ l. I felt it was time to stop.
- ☐ m. My partner/family didn't want me to breastfeed.
- ☐ n. I was embarrassed about breastfeeding in front of others.
- ☐ o. Other: _____

48. How old was your baby when you first fed solid foods?

- ☐ a. 4 weeks or less (one month or less)
- ☐ b. 5-8 weeks (one to two months)
- ☐ c. 9-12 weeks (two to three months)
- ☐ d. 13-16 weeks (three to four months)
- ☐ e. 17-20 weeks (four to five months)
- ☐ f. 21-24 weeks (five to six months)
- ☐ g. More than 24 weeks (six months or older)
- ☐ h. My baby is not eating solid foods yet.

49. In what position do you most often lay your baby down for sleep? *Check only one answer.*

- ☐ a. Stomach
- ☐ b. Back
- ☐ c. Side

50. Why did you choose this sleeping position for your baby? *Check all that apply.*

- ☐ a. Doctor or nurse at clinic suggested it.
- ☐ b. WIC staff suggested it.
- ☐ c. A Public Health Nurse/Community Health Nurse suggested it.
- ☐ d. A family member or friend suggested it.
- ☐ e. I read about it in a magazine, newspaper or baby care book.
- ☐ f. I heard about it on TV or radio.
- ☐ g. This is the way my other children slept.
- ☐ h. I sleep in this position.
- ☐ i. I was afraid of vomiting/spitting up /choking.
- ☐ j. Bright Start home visits.
- ☐ k. Other – Please tell us why - _____

51. Where does your baby **usually** sleep at night? *Check only one answer.*

- ☐ a. Crib, standard size
- ☐ b. Bassinet, cradle
- ☐ c. Portable crib
- ☐ d. Adult bed
- ☐ e. Playpen
- ☐ f. Infant or car safety seat
- ☐ g. Other: _____

52. What type of material is usually under the baby when sleeping? *Check all that apply.*

- ☐ a. Mattress, firm
- ☐ b. Foam pad
- ☐ c. Mattress pad
- ☐ d. Sheet
- ☐ e. Water bed
- ☐ f. Sleeping bag
- ☐ g. Pillow
- ☐ h. Blankets
- ☐ i. Rug
- ☐ j. Cushion
- ☐ k. Sheepskin
- ☐ l. Beanbag
- ☐ m. Featherbed
- ☐ n. Other: _____

53. How many times has your baby been to a medical provider for **routine well baby check-ups** (check-ups when your baby was not sick)?

- ☐ 0 times
- ☐ 1 time
- ☐ 2 times
- ☐ 3 times
- ☐ 4 times
- ☐ 5 times or more

54. Did anything keep you from taking your baby to the medical provider for routine well baby care?

- ☐ No.
- ☐ Yes, if yes **check all** that apply from the responses below:
 - ☐ a. I had no insurance and didn't have enough money to pay for visit.
 - ☐ b. My insurance wouldn't pay for it.
 - ☐ c. My insurance pays some, but I can't afford to pay the rest of the cost.
 - ☐ d. I couldn't get an appointment.
 - ☐ e. I had no way to get the baby to the doctor or clinic.
 - ☐ f. I didn't have anyone to take care of my other children.
 - ☐ g. I didn't know when to bring my baby back to the doctor.
 - ☐ h. Bad weather prevented me from taking my baby to the doctor.
 - ☐ i. I don't believe well baby care is necessary.
 - ☐ j. My child is frequently sick and seen by a doctor.
 - ☐ k. Other - please tell us: _____

55. Did any of these things keep you from getting medical care for your baby when he or she was sick?

- ☐ No, nothing kept us from medical care when our baby was sick.
- ☐ No, my baby has not been sick
- ☐ Yes, if yes **check all** that apply from the responses below:
 - ☐ a. I had no insurance and didn't have enough money to pay for visit.
 - ☐ b. My insurance wouldn't pay for it.
 - ☐ c. My insurance pays some, but I couldn't afford to pay the rest.
 - ☐ d. I couldn't get an appointment.
 - ☐ e. I had no way to get my baby to the doctor or clinic.
 - ☐ f. I didn't have anyone to take care of my other children.
 - ☐ g. Other - please tell us: _____

56. When traveling in a vehicle are you using a car safety seat for your baby?

- ☐ Always *Answer 57 A*
- ☐ Sometimes *Answer 57 A and 57 B*
- ☐ Never *Answer 57 C*

57. **A.** If Always or Sometimes, how does the baby ride when traveling in a vehicle? *Check the answer that applies most of the time.*

- ☐ a. In the front seat facing backwards (safety seat faces back of vehicle).
- ☐ b. In the front seat facing forwards (safety seat faces windshield).
- ☐ c. In the back seat facing backwards (safety seat faces back of vehicle).
- ☐ d. In the back seat facing forward (safety seat faces windshield).

57. **B.** If Sometimes, why aren't you always using a car safety seat? *Check all that apply.*

- ☐ a. Sometimes baby is crying.
- ☐ b. Sometimes baby requires feeding or a diaper change.
- ☐ c. Sometimes takes too much time.
- ☐ d. Other : _____

57. **C.** If Never, why aren't you using a car safety seat? *Check all that apply.*

- ☐ a. Can't afford one.
- ☐ b. Don't believe they are necessary.
- ☐ c. My baby doesn't like riding in one.
- ☐ d. The car safety seat is inconvenient to use.
- ☐ e. Other: _____

58. Where do you go most of the time for your birth control or family planning services? *Check only one answer.*

- ☐ a. Family Planning Program/Clinic
- ☐ b. Private Physician/Clinic
- ☐ c. Community Health Center
- ☐ d. USD Residency Program
- ☐ e. Indian Health Service
- ☐ f. Military Health System
- ☐ g. Over-the-counter (condoms, foams, etc.)
- ☐ h. I don't go anywhere, I've had my tubes tied or my husband or partner has had a vasectomy
- ☐ i. I'm using natural family planning, so don't go anywhere
- ☐ j. I'm not using any kind of birth control
- ☐ k. Other: _____

Now, just a few final questions:

59. How many people are in your household?

_____ Total number of people

_____ How many are 17 years or younger?

60. What is the highest level of education that you and the baby's father have completed?

Mother	Father	
<input type="checkbox"/>	<input type="checkbox"/>	No formal education
<input type="checkbox"/>	<input type="checkbox"/>	Some Grade School
<input type="checkbox"/>	<input type="checkbox"/>	Completed Grade School
<input type="checkbox"/>	<input type="checkbox"/>	Some High School
<input type="checkbox"/>	<input type="checkbox"/>	Completed High School/GED
<input type="checkbox"/>	<input type="checkbox"/>	Some College or Technical School
<input type="checkbox"/>	<input type="checkbox"/>	Completed College
<input type="checkbox"/>	<input type="checkbox"/>	Some Graduate Work
<input type="checkbox"/>	<input type="checkbox"/>	Completed Graduate Work

61. What is your age? _____ Years

62. What is the age of the baby's father? _____ Years

63. Give the name of South Dakota county in which you live

_____ County

64. What is your annual household income before taxes and other deductions?

- ☐ a. Under \$10,000
- ☐ b. \$10,000 - \$19,999
- ☐ c. \$20,000 - \$29,999
- ☐ d. \$30,000 - \$39,999
- ☐ e. \$40,000 - \$49,999
- ☐ f. \$50,000 or More
- ☐ g. Don't Know

65. What is your race? *Check one to indicate what you consider yourself to be.*

- ☐ a. White
- ☐ b. Black or African American
- ☐ c. American Indian or Alaskan Native
- ☐ d. Asian
- ☐ e. Native Hawaiian or other Pacific Islander
- ☐ f. Other, Specify _____

66. Are you of Hispanic origin?

- ☐ Yes
- ☐ No

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